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TERMINAL (ENTER 1, 2, 3, OR ?):2

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NEWS	1			Web Page for STN Seminar Schedule - N. America
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NEWS	3	APR	02	PATDPAFULL: Application and priority number formats enhanced
NEWS	4	APR	0.2	DWPI: New display format ALLSTR available
NEWS	5	APR		New Thesaurus Added to Derwent Databases for Smooth Sailing through U.S. Patent Codes
NEWS	6	APR	02	EMBASE Adds Unique Records from MEDLINE, Expanding
NEWS	7	APR	07	Coverage back to 1948 CA/CAplus CLASS Display Streamlined with Removal of Pre-IPC 8 Data Fields
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NEWS	9	APR	0.7	MEDLINE Coverage Is Extended Back to 1947
NEWS		JUN		WPI First View (File WPIFV) will no longer be available after July 30, 2010
NEWS	11	JUN	1.8	DWPI: New coverage - French Granted Patents
NEWS		JUN		CAS and FIZ Karlsruhe announce plans for a new
				STN platform
NEWS	13	JUN	18	IPC codes have been added to the INSPEC backfile (1969-2009)
NEWS	14	JUN	21	Removal of Pre-IPC 8 data fields streamline displays in CA/CAplus, CASREACT, and MARPAT
NEWS	15	JUN	21	Access an additional 1.8 million records exclusively enhanced with 1.9 million CAS Registry Numbers
NEWS	16	JUN	28	EMBASE Classic on STN Introducing "CAS Chemistry Research Report": 40 Years of Biofuel Research Reveal China Now Atop U.S. in
NEWS	17	JUN	29	Patenting and Commercialization of Bioethanol Enhanced Batch Search Options in DGENE, USGENE,
NEWS	18	JUL	19	and PCTGEN Enhancement of citation information in INPADOC
NEWS	19	JUL	26	databases provides new, more efficient competitor analyses CAS coverage of global patent authorities has expanded to 61 with the addition of Costa Rica
NEWS	EXPI			RUARY 15 10 CURRENT WINDOWS VERSION IS V8.4.2, RENT DISCOVER FILE IS DATED 07 JULY 2010.

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SINCE FILE TOTAL ENTRY SESSION 0.22 0.22

FULL ESTIMATED COST

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4 AUG 2010 HIGHEST RN 1235013-90-7 STRUCTURE FILE UPDATES: DICTIONARY FILE UPDATES: 4 AUG 2010 HIGHEST RN 1235013-90-7

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L1 STRUCTURE UPLOADED

=> s 11 SAMPLE SEARCH INITIATED 17:44:36 FILE 'REGISTRY' SAMPLE SCREEN SEARCH COMPLETED - 12433 TO ITERATE

16.1% PROCESSED 2000 ITERATIONS 50 ANSWERS INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED) SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\* BATCH \*\*COMPLETE\*\*

241977 TO 255343 PROJECTED ITERATIONS: 22631 TO 26851 PROJECTED ANSWERS:

50 SEA SSS SAM L1

=> s 11 full

THE ESTIMATED SEARCH COST FOR FILE 'REGISTRY' IS 191.05 U.S. DOLLARS DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y) /N or END:y FULL SEARCH INITIATED 17:44:44 FILE 'REGISTRY'

22969 ANSWERS

FULL SCREEN SEARCH COMPLETED - 246228 TO ITERATE

100.0% PROCESSED 246228 ITERATIONS

22969 SEA SSS FUL L1

SEARCH TIME: 00.00.01

=> file hcaplus COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 194.48 194.70 FULL ESTIMATED COST

FILE 'HCAPLUS' ENTERED AT 17:44:48 ON 05 AUG 2010 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2010 AMERICAN CHEMICAL SOCIETY (ACS)

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FILE COVERS 1907 - 5 Aug 2010 VOL 153 ISS 6 FILE LAST UPDATED: 4 Aug 2010 (20100804/ED) REVISED CLASS FIELDS (/NCL) LAST RELOADED: Jun 2010 USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Jun 2010

HCAplus now includes complete International Patent Classification (IPC) reclassification data for the second quarter of 2010.

CAS Information Use Policies apply and are available at:

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This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s 13L4 5489 L3 => s 14 and jernstedt, h?/au 3 JERNSTEDT, H?/AU L5 1 L4 AND JERNSTEDT, H?/AU

=> d 15, ibib abs fhitstr, 1 THE ESTIMATED COST FOR THIS REQUEST IS 5.81 U.S. DOLLARS DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y) /N:y

L5 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 2005:409459 HCAPLUS

DOCUMENT NUMBER: 142:463609

TITLE: Preparation of [(phenyl/pyridinyl)amino]alkanols and related compounds as androgen receptor modulators with

therapeutic uses INVENTOR(S):

Jernstedt, Henrik; Garg, Neeraj; Gustavsson, Annika; Gillner, Mikael; Garcia Collazo, Ana Maria;

Koch, Eva

PATENT ASSIGNEE(S): Karo Bio AB, Swed.; Elsy, David SOURCE: PCT Int. Appl., 98 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND DATE	APPLICATION NO.	DATE
WO 2005042464	A1 20050512	WO 2004-GB4464	20041021
W: AE, AG, AL,	AM, AT, AU, AZ,	BA, BB, BG, BR, BW, BY	, BZ, CA, CH,
CN, CO, CR,	CU, CZ, DE, DK,	DM, DZ, EC, EE, EG, ES	, FI, GB, GD,
GE, GH, GM,	HR, HU, ID, IL,	IN, IS, JP, KE, KG, KP	, KR, KZ, LC,
LK, LR, LS,	LT, LU, LV, MA,	MD, MG, MK, MN, MW, MX	MZ, NA, NI,
		RO, RU, SC, SD, SE, SG	
		UG, US, UZ, VC, VN, YU	
		NA, SD, SL, SZ, TZ, UG	
		TM, AT, BE, BG, CH, CY	
		IE, IT, LU, MC, NL, PL	
		CI, CM, GA, GN, GO, GW	
SN, TD, TG	Br, Bo, Cr, CG,	CI, CM, GA, GN, GQ, GW	, PIL, PIK, NE,
	31 20050512	AU 2004-285744	20041021
		CA 2004-2543345	
		EP 2004-768980	
		GB, GR, IT, LI, LU, NL	, SE, MC, PI,
		CZ, EE, HU, PL, SK	00011001
JP 2007509116		JP 2006-536167	
		IN 2006-KN1357	
	A1 20080306	US 2007-576777	
PRIORITY APPLN. INFO.:		GB 2003-24551	
		WO 2004-GB4464	
ASSIGNMENT HISTORY FOR U			

OTHER SOURCE(S): CASREACT 142:463609; MARPAT 142:463609

AB

[(Phenyl/pyridinyl)amino]alkanols and related compds. (shown as I; variables defined below; e.g. 2-methyl-2-(4-nitro-3trifluoromethylphenylamino)propan-1-ol and (R)-2-(6-methyl-5-nitropyridin-2-ylamino)-3-(phenylmethylsulfinyl)propan-1ol) can be used for treatment of diseases caused by disturbances of the activity of the androgen receptor. Isolated compds. I are also claimed. For I: R1 and R2 = H, halogen, C1-C10 (un)substituted alkyl, C2-C10 alkenyl, C2-C10 alkynyl, C1-C10 alkoxy, C1-C10 alkenoxy, C1-C10 alkynoxy, C1-C10 alkylthio, C1-C10 alkenylthio, C1-C10 alkynylthio, C6-C10 arylthio, C1-C10 alkylsulfonyl, C1-C10 alkenylsulfonyl, C1-C10 alkynylsulfonyl, C6-C10 arylsulfonyl, C1-C10 alkylsulfinyl, C1-C10 alkenylsulfinyl, C1-C10 alkynylsulfinyl, C6-C10 arylsulfinyl, C1-C10 alkylarylthio, C1-C10 alkylarylsulfonyl, C1-C10 alkylarylsulfinyl, C6-C10 aryl, or C5-C20 heteroaryl, (un)substituted with 0-3 groups of Ra which groups may be the same or different; or R1 and R2 may together form a C3-C10 cycloalkyl group. R3 and R4 = H, halogen, C1-C20 alkyl, C3-C7 cycloalkyl, C2-C4 alkenyl, C2-C4 alkynyl, C1-C4 alkoxy, C1-C4 alkenoxy, C1-C4 alkynoxy, C1-C4 alkylthio, C1-C4 alkenylthio, C1-C4 alkynylthio, C1-C10 alkylsulfonyl, C1-C10 alkenylsulfonyl, C1-C10 alkynylsulfonyl, C6-C10 arylsulfonyl, C1-C10 alkylsulfinyl, C1-C10 alkenylsulfinyl, C1-C10 alkynylsulfinyl, C6-C10 arylsulfinyl, C1-C10 alkylarylthio, C1-C10 alkylarylsulfonyl, C1-C10 alkylarylsulfinyl, C6-C15 aryl, C5-C20heteroaryl (un) substituted with 0-3 groups of Ra which groups may be the same or different; or can together form a keto group. R5 = nitro, cyano, -CH2CN, -COMe, HOAc, halogen, sulfonic acid, -SO2CH3, aldehyde, carboxylic acid or ester, phosphonic acid or ester; R6 = H, C1-C5 alkvl, halogen, CN, CO2H, CHF2, CH2F or CF3; R7 = H, halogen or C1-C5 alkvl; R5 = H, C1-C5 alkvl, halogen, CHF2, CH2F or CF3; X = -NH-, -O-, -S-, -SO-, -SO2, -Se-, -Te- or -S-S-; Y = H, hydroxy, -CH2OH, methoxy, NH2, unbranched, branched or cyclic C1-C5 alkyl, unbranched, branched or cyclic -NH(C1-C8); unbranched, branched or cyclic N(C1-C8)2, -NH(C6aryl), -N(C6aryl)2, -NH(C1-C10 heteroaryl), and -N(C5-C10 heteroaryl)2, C5-C10 heteroaryl wherein any of said aryl or heteroaryl groups are (un)substituted with up to 3 groups of Ra which groups may be the same or different; Z = C, N, or O; Ra = H, halogen, -CN, OH, CO2H, CHO, NO2, -NH2, -NH(C1-C4); N(C1-C4)2, -NH(C6 aryl), -N(C6 aryl)2, -NH(C5-C10 heteroaryl), and - N(C5-C10 heteroaryl)2. Although the methods of preparation are not claimed, 111 example prepns. are included. For example, 2-Methyl-2-(4-nitro-3trifluoromethylphenylamino)propan-1-ol was prepared (68 %) from 4-fluoro-1-nitro-2-trifluoromethylbenzene and 2-amino-2-methylpropan-1-ol in DMSO in the presence of iPr2EtN in a microwave oven. 57 Of the example I were made as part of a library synthesis from 0.1 mmol 5-fluoro-2-nitrotoluene, 5-fluoro-2-nitrobenzotrifluoride, or

6-fluoro-2-methyl-3-nitropyridine in a vial to which was added <math display="inline">0.5~ML DMSO,  $20~\mu L$  triethylamine (1.4 equiv), and 1.4 equiv of 1 of many diverse amino alcs. and the vials were heated in a microwave oven. Androgen receptor competition binding and transactivation (agonist and antagonist) assay results are tabulated for 14 examples of I.

IIT 353285-92-4P, 2-Methyl-2-(6-methyl-5-nitropyridin-2vlamino)propan-1-o1

RE: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(drug candidate; preparation of [(phenyl/pyridinyl)amino]alkanols and related compds. as androgen receptor modulators with therapeutic uses) RN 353285-92-4 HCAPLUS

CN 1-Propanol, 2-methyl-2-[(6-methyl-5-nitro-2-pyridinyl)amino]- (CA INDEX NAME)

OS.CITING REF COUNT: 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD (4 CITINGS)

REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> d his

(FILE 'HOME' ENTERED AT 17:40:37 ON 05 AUG 2010)

FILE 'REGISTRY' ENTERED AT 17:40:47 ON 05 AUG 2010

L1 STRUCTURE UPLOADED

L2 50 S L1 L3 22969 S L1 FULL

FILE 'HCAPLUS' ENTERED AT 17:44:48 ON 05 AUG 2010 4 5489 S L3

L4 5489 S L3 L5 1 S L4 AND JERNSTEDT, H?/AU

=> file reg COST IN U.S. DOLLARS SINCE FILE TOTAL SESSION ENTRY FULL ESTIMATED COST 17.45 212.15 DISCOUNT AMOUNTS (FOR OUALIFYING ACCOUNTS) SINCE FILE TOTAL ENTRY SESSION CA SUBSCRIBER PRICE -0.85-0.85 FILE 'REGISTRY' ENTERED AT 17:46:57 ON 05 AUG 2010 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

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http://www.cas.org/support/stngen/stndoc/properties.html

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STRUCTURE UPLOADED L6

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SAMPLE SEARCH INITIATED 17:47:11 FILE 'REGISTRY' SAMPLE SCREEN SEARCH COMPLETED -455 TO ITERATE

100.0% PROCESSED

455 ITERATIONS SEARCH TIME: 00.00.01

12 ANSWERS

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\* BATCH \*\*COMPLETE\*\* PROJECTED ITERATIONS: 7821 TO 10379 PROJECTED ANSWERS: 33 TO 447

12 SEA SSS SAM L6

=> s 16 full

THE ESTIMATED SEARCH COST FOR FILE 'REGISTRY' IS 191.05 U.S. DOLLARS DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y) /N or END:y FULL SEARCH INITIATED 17:47:16 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 8926 TO ITERATE

100.0% PROCESSED 8926 ITERATIONS SEARCH TIME: 00.00.01

186 ANSWERS

L8 186 SEA SSS FUL L6

=> file hcaplus COST IN U.S. DOLLARS

FULL ESTIMATED COST

SINCE FILE TOTAL. ENTRY SESSION 191.54 403.69

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE ENTRY 0.00

TOTAL SESSION -0.85

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FILE COVERS 1907 - 5 Aug 2010 VOL 153 ISS 6 FILE LAST UPDATED: 4 Aug 2010 (20100804/ED) REVISED CLASS FIELDS (/NCL) LAST RELOADED: Jun 2010 USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Jun 2010

HCAplus now includes complete International Patent Classification (IPC) reclassification data for the second quarter of 2010.

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This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s 18 L9

95 L8

=> s 19 and jernstedt, h?/au 3 JERNSTEDT, H?/AU L10 1 L9 AND JERNSTEDT, H?/AU

=> d 110, ibib abs fhitstr, 1

THE ESTIMATED COST FOR THIS REQUEST IS 5.81 U.S. DOLLARS DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y) /N:y

L10 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 2005:409459 HCAPLUS

DOCUMENT NUMBER: 142:463609

TITLE:

Preparation of [(phenyl/pyridinyl)amino]alkanols and related compounds as androgen receptor modulators with therapeutic uses
INVENTOR(S): Jernstedt, Henril

Jernstedt, Henrik; Garg, Neeraj; Gustavsson,

Annika; Gillner, Mikael; Garcia Collazo, Ana Maria; Koch, Eva

PATENT ASSIGNEE(S): Karo Bio AB, Swed.; Elsy, David

SOURCE: PCT Int. Appl., 98 pp.

CODEN: PIXXD2
DOCUMENT TYPE: Patent

LANGUAGE: Patent English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PZ	ATENT	NO.			KIN		DATE				LICAT					ATE	
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		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,
		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KP,	KR,	KZ,	LC,
		LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NA,	NI,
		NO.	NZ.	OM.	PG.	PH.	PL.	PT.	RO.	RU.	SC,	SD.	SE.	SG.	SK,	SL.	SY,
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		EE.	ES.	FI.	FR.	GB.	GR.	HU.	IE.	IT.	LU,	MC.	NL.	PL.	PT.	RO.	SE.
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CZ	2543	3345			A1		2005	0512		CA 2	2004-	2543	345		2	0041	021
	168						2006	0802		EP 2	2004-	7689	80		2	0041	021
	R:	AT,	BE.	CH,	DE.	DK.	ES.	FR.	GB,	GR.	IT.	LI.	LU.	NL.	SE,	MC.	PT.
		IE,	SI,	FI,	RO,	CY,	TR,	BG,	CZ,	EE,	HU,	PL,	SK				
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11	1 2000	SKN01	357		A		2007	0504		IN 2	2006-	KN13	57		2	0060	522
	2008															0070	612
PRIORIT	Y API	PLN.	INFO	. :						GB 2	2003-	2455	1		A 2	0031	021
										WO 2	2004-	GB44	64		W 2	0041	021
ASSIGNN	MENT I	HISTO	RY F	OR U	S PA	TENT	: AVA	ILAB:	LE I	N LS	SUS D	ISPL.	AY F	ORMA	T		

$$\begin{array}{c|c} R^7 \\ R6 \\ Z \\ XCR1R2CR3R4Y \\ \\ R5 \\ R8 \\ \end{array}$$

OTHER SOURCE(S):

GI

AB [(Phenyl/pyridinyl)amino]alkanols and related compds. (shown as I; variables defined below; e.q. 2-methyl-2-(4-nitro-3-

trifluoromethylphenylamino)propan-1-ol and

(R)-2-(6-methyl-5-nitropyridin-2-ylamino)-3-(phenylmethylsulfinyl)propan-1-

CASREACT 142:463609; MARPAT 142:463609

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ol) can be used for treatment of diseases caused by disturbances of the
activity of the androgen receptor. Isolated compds. I are also claimed.
For I: R1 and R2 = H, halogen, C1-C10 (un)substituted alkyl, C2-C10
alkenyl, C2-C10 alkynyl, C1-C10 alkoxy, C1-C10 alkenoxy, C1-C10 alkynoxy,
C1-C10 alkylthio, C1-C10 alkenylthio, C1-C10 alkynylthio, C6-C10 arylthio,
C1-C10 alkylsulfonyl, C1-C10 alkenylsulfonyl, C1-C10 alkynylsulfonyl,
C6-C10 arvlsulfonvl, C1-C10 alkvlsulfinvl, C1-C10 alkenvlsulfinvl, C1-C10
alkynylsulfinyl, C6-C10 arylsulfinyl, C1-C10 alkylarylthio, C1-C10
alkylarylsulfonyl, C1-C10 alkylarylsulfinyl, C6-C10 aryl, or C5-C20
heteroaryl, (un)substituted with 0-3 groups of Ra which groups may be the
same or different; or R1 and R2 may together form a C3-C10 cycloalkyl
group. R3 and R4 = H, halogen, C1-C20 alkyl, C3-C7 cycloalkyl, C2-C4
alkenyl, C2-C4 alkynyl, C1-C4 alkoxy, C1-C4 alkenoxy, C1-C4 alkynoxy,
C1-C4 alkylthio, C1-C4 alkenylthio, C1-C4 alkynylthio, C1-C10
alkylsulfonyl, C1-C10 alkenylsulfonyl, C1-C10 alkynylsulfonyl, C6-C10
arylsulfonyl, C1-C10 alkylsulfinyl, C1-C10 alkenylsulfinyl, C1-C10
alkynylsulfinyl, C6-C10 arylsulfinyl, C1-C10 alkylarylthio, C1-C10
alkylarylsulfonyl, C1-C10 alkylarylsulfinyl, C6-C15 aryl, C5-C20heteroaryl
(un) substituted with 0-3 groups of Ra which groups may be the same or
different; or can together form a keto group. R5 = nitro, cyano, -CH2CN, -COMe, HOAc, halogen, sulfonic acid, -SO2CH3, aldehyde, carboxylic acid or
ester, phosphonic acid or ester; R6 = H, C1-C5 alkyl, halogen, CN, C02H,
CHF2, CH2F or CF3; R7 = H, halogen or C1-C5 alkyl; R5 = H, C1-C5 alkyl,
halogen, CHF2, CH2F or CF3; X = -NH-, -O-, -S-, -SO-, -SO2, -Se-, -Te- or
-S-S-; Y = H, hydroxy, -CH2OH, methoxy, NH2, unbranched, branched or
cyclic C1-C5 alkyl, unbranched, branched or cyclic -NH(C1-C8); unbranched,
branched or cyclic N(C1-C8)2, -NH(C6aryl), -N(C6aryl)2, -NH(C1-C10
heteroaryl), and -N(C5-C10 heteroaryl)2, C5-C10 heteroaryl wherein any of
said aryl or heteroaryl groups are (un)substituted with up to 3 groups of
Ra which groups may be the same or different; Z = C, N, or O; Ra = H,
halogen, -CN, OH, CO2H, CHO, NO2, -NH2, -NH(C1-C4); N(C1-C4)2, -NH(C6
aryl), -N(C6 aryl)2, -NH(C5-C10 heteroaryl), and -N(C5-C10 heteroaryl)2.
Although the methods of preparation are not claimed, 111 example prepns. are
included. For example, 2-Methyl-2-(4-nitro-3-
trifluoromethylphenylamino)propan-1-ol was prepared (68 %) from
4-fluoro-1-nitro-2-trifluoromethylbenzene and 2-amino-2-methylpropan-1-ol
in DMSO in the presence of iPr2EtN in a microwave oven. 57 Of the example
I were made as part of a library synthesis from 0.1 mmol
5-fluoro-2-nitrotoluene, 5-fluoro-2-nitrobenzotrifluoride, or
6-fluoro-2-methyl-3-nitropyridine in a vial to which was added 0.5 mL
DMSO, 20 µL triethylamine (1.4 equiv), and 1.4 equiv of 1 of many
diverse amino alcs. and the vials were heated in a microwave oven.
Androgen receptor competition binding and transactivation (agonist and
antagonist) assav results are tabulated for 14 examples of I.
851445-91-5P, (S)-2-(4-Nitro-3-trifluoromethylphenylamino)butan-
1-ol
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
(Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
(Uses)
   (drug candidate; preparation of [(phenyl/pyridinyl)amino]alkanols and
```

related compds. as androgen receptor modulators with therapeutic uses)

1-Butanol, 2-[(4-nitro-3-(trifluoromethyl)phenyl]amino]-, (2S)- (CA INDEX

Absolute stereochemistry.

851445-91-5 HCAPLUS

NAME)

CN

STN Search

OS.CITING REF COUNT: 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD (4 CITINGS)

REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> d his

L11

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(FILE 'HOME' ENTERED AT 17:40:37 ON 05 AUG 2010)
FILE 'REGISTRY' ENTERED AT 17:40:47 ON 05 AUG 2010
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STRUCTURE UPLOADED 50 S L1 L2

L3 22969 S L1 FULL

FILE 'HCAPLUS' ENTERED AT 17:44:48 ON 05 AUG 2010

5489 S L3 L4 L5 1 S L4 AND JERNSTEDT, H?/AU

FILE 'REGISTRY' ENTERED AT 17:46:57 ON 05 AUG 2010

L6 STRUCTURE UPLOADED L7 12 S L6

186 S L6 FULL L8

FILE 'HCAPLUS' ENTERED AT 17:47:20 ON 05 AUG 2010

L9 95 S L8 L10 1 S L9 AND JERNSTEDT, H?/AU

=> s 19 not 110

94 L9 NOT L10 => s 111 and garg, n?/au

364 GARG, N?/AU L12

0 L11 AND GARG, N?/AU

=> s 111 and gustavsson, a?/au 172 GUSTAVSSON, A?/AU

0 L11 AND GUSTAVSSON, A?/AU

=> s 111 and gillner, m?/au

64 GILLNER, M?/AU L14 0 L11 AND GILLNER, M?/AU

=> s 111 and collazo, a?/au 44 COLLAZO, A?/AU

L15 0 L11 AND COLLAZO, A?/AU

=> s 111 and koch, e?/au 1206 KOCH, E?/AU

L16 0 L11 AND KOCH, E?/AU

=> d ll1, ibib abs fhitstr, 1-94
THE ESTIMATED COST FOR THIS REQUEST IS 546.14 U.S. DOLLARS
DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y)/N:y

L11 ANSWER 1 OF 94 HCAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2009:846111 HCAPLUS

DOCUMENT NUMBER: 151:92848

TITLE: Method using lifespan-altering compounds for altering the lifespan of eukaryotic organisms, and screening

for such compounds
INVENTOR(S): Goldfarb, David Scott

PATENT ASSIGNEE(S): University of Rochester, USA SOURCE: U.S. Pat. Appl. Publ., 57pp.

DOCUMENT TYPE: CODEN: USXXCO

DATE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 20

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20090163545	A1	20090625	US 2008-341615	20081222
US 20090163545	A1	20090625	US 2008-341615	20081222
AU 2008345225	A1	20090709	AU 2008-345225	20081222
PRIORITY APPLN. INFO.:			US 2008-23801P P	20080125
			US 2007-16362P P	20071221
			US 2008-341615	20081222
			WO 2008-US88016 W	20081222

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

AB The invention discloses a method for altering the lifespan of a eukaryotic organism. The method comprises the steps of providing a lifespan-altering compound, and administering an effective amount of the compound to a eukaryotic organism, such that the lifespan of the organism is altered. In one embodiment, the compound is identified using the DeaD asay. [This abstract record is one of 20 records for this document necessitated by the large number of index entries required to fully index the document and publication system constraints.]

IT 180424-16-2

RL: PAC (Pharmacological activity); BIOL (Biological study) (method using lifespan-altering compds. for altering lifespan of eukaryotic organisms, and screening for such compds.)

RN 180424-16-2 HCAPLUS

CN 3-Pyridinecarbonitrile, 2-[[1-(hydroxymethyl)propyl]amino]-5-nitro- (CA INDEX NAME)

L11 ANSWER 2 OF 94 HCAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2009:770529 HCAPLUS

DOCUMENT NUMBER: 151:245287

TITLE: Isocyanide-based multicomponent reaction 'without' isocyanides

AUTHOR(S): El Kaim, Laurent; Grimaud, Laurence; Schiltz, Aurelie CORPORATE SOURCE: Laboratoire Chimie et Procedes, Ecole Nationale

Superieure de Techniques Avancees, Paris, 75739/15,

SOURCE: Synlett (2009), (9), 1401-1404 CODEN: SYNLES; ISSN: 0936-5214

PUBLISHER: Georg Thieme Verlag

DOCUMENT TYPE: Journal LANGUAGE: English

LANGUAGE: English
OTHER SOURCE(S): CASREACT 151:245287

AB We present here a one-pot, four-component sequence that affords Ugi-type adducts, e.g., I, starting from simple benzyl or allyl bromides. The isocyanides are prepared in situ under alkylation of silver cyanide salts and the resulting mixture is directly used in a Ugi-Smiles coupling.

IT 1178564-05-0P RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of amino amide derivs. via isocyanation of benzylbromides with cyanides followed by Ugi-Smiles coupling with nitrophenols, amines and aldehydes)

RN 1178564-05-0 HCAPLUS

CN Butanamide, N-[[4-(1,1-dimethylethyl)phenyl]methyl]-2-[(4-nitrophenyl)-2-propen-1-ylamino]- (CA INDEX NAME)

OS.CITING REF COUNT: THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD

(1 CITINGS)

REFERENCE COUNT: 50 THERE ARE 50 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 3 OF 94 HCAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2009:659155 HCAPLUS

DOCUMENT NUMBER: 151:221431

TITLE: Analysis of multicomponent mixture and simultaneous

enantioresolution of proteinogenic and

non-proteinogenic amino acids by reversed-phase high-performance liquid chromatography using chiral

variants of Sanger's reagent

AUTHOR(S): Bhushan, Ravi; Kumar, Rajender

CORPORATE SOURCE: Department of Chemistry, Indian Institute of

Technology Roorkee, Roorkee, 247 667, India Analytical and Bioanalytical Chemistry (2009), 394(6), SOURCE:

1697-1705

CODEN: ABCNBP; ISSN: 1618-2642

PUBLISHER: Springer DOCUMENT TYPE: Journal

LANGUAGE: English OTHER SOURCE(S):

CASREACT 151:221431

Four chiral derivatizing reagents (CDR), namely, FDNP-L-Ala, FDNP-L-Val, FDNP-L-Phe, and FDNP-L-Leu, were synthesized using microwave (MW) irradiation by substituting one of the fluorine atoms in difluoro dinitro benzene (DFDNB) with L-Ala, L-Val, L-Phe, and L-Leu. The other set of CDRs, namely, FDNP-L-Phe-NH2, FDNP-L-Val-NH2, and FDNP-L-Leu-NH2, was also prepared These reagents were used for synthesis of diastereomers of 18 proteinogenic and 8 non-proteinogenic amino acids, which were resolved by reversed-phase high-performance liquid chromatog, using C18 column and gradient eluting mixture of aqueous TFA and acetonitrile with UV detection at 340 nm. The reagents were used for resolution of a complex mixture of 18 racemic proteinogenic amino acids in a single chromatog. run of 65 min and to determine concentration of the D-amino acid in a solution of DL-amino acid.

The

resolution (Rs) and selectivity (a) obtained for the two sets of diastereomers were compared among themselves and among the two groups. The method was validated for accuracy, precision, limit of detection (LOD), and limit of quantification. LOD is 0.001% impurity of D-enantiomer.

1122591-18-7P

RL: ANT (Analyte); PUR (Purification or recovery); SPN (Synthetic preparation); ANST (Analytical study); PREP (Preparation) (synthesis of Sanger chiral derivatizing reagents by fluorine substitution in difluoro dinitro benzene with amino acid under microwave irradiation and their using for enantiomeric resolution of amino acids by reversed-phase HPLC)

RN 1122591-18-7 HCAPLUS

CN Butanoic acid, 2-[[5-[[(1S)-1-(aminocarbony1)-2-methylpropy1]amino]-2,4-dinitrophenyl]amino]-, (2R)- (CA INDEX NAME)

Absolute stereochemistry.

OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD
(1 CITINGS)

REFERENCE COUNT: 31 THERE ARE 31 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 4 OF 94 HCAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2008:837528 HCAPLUS

DOCUMENT NUMBER: 149:200740

TITLE: New MCR-Heck-Isomerization Cascade toward Indoles AUTHOR(S): El Kaim, Laurent; Gizzi, Marion; Grimaud, Laurence CORPORATE SOURCE: Laboratoire Chimie et Procedes, Ecole Nationale

Superieure de Techniques Avancees, Paris, 75739, Fr. SOURCE: Organic Letters (2008), 10(16), 3417-3419

CODEN: ORLEF7; ISSN: 1523-7060

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 149:200740

GI

AB The use of ortho-iodonitrophenol in Ugi-Smiles reaction to afford adducts

such as I, coupled with Heck cyclization gives new access to indole scaffolds, e.g., II. The sequence can be performed in a one-pot reaction if the residual isocvanide is neutralized prior to the addition of the palladium catalyst.

1040741-64-7P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of [allvl(iodoarvl)aminolamides via Ugi-Smiles coupling between aldehydes, allylamines, isocyanides, and aryl or heteroaryl phenols)

RN 1040741-64-7 HCAPLUS

CN Butanamide, 2-[(2-iodo-4-nitrophenyl)-2-propen-1-ylamino]-N-(phenylmethyl)-(CA INDEX NAME)

OS.CITING REF COUNT: THERE ARE 10 CAPLUS RECORDS THAT CITE THIS 10

RECORD (10 CITINGS)

REFERENCE COUNT: THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS 17 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 5 OF 94 HCAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2008:621675 HCAPLUS

DOCUMENT NUMBER: 150:283353

TITLE: Indirect TLC resolution of amino acid enantiomers after derivatization with Marfev"s reagent and its

chiral variants

AUTHOR(S): Bhushan, Ravi; Bruckner, Hans; Kumar, Virender; Gupta,

Deepak

CORPORATE SOURCE: Department of Chemistry, Indian Institute of

Technology Roorkee, Roorkee, 247 667, India SOURCE: Journal of Planar Chromatography--Modern TLC (2007),

20(3), 165-171

CODEN: JPCTE5: ISSN: 0933-4173

PUBLISHER: Akademiai Kiado

DOCUMENT TYPE: Journal LANGUAGE: English

OTHER SOURCE(S): CASREACT 150:283353

A simple and rapid method has been established for indirect separation of the optical isomers of seventeen DL-amino acids by reversed-phase and

normal-phase TLC. Amino acids derivatized with

1-fluoro-2, 4-dinitrophenyl-5-L-alaninamide (FDNP-L-Ala-NH2),

1-fluoro-2, 4-dinitrophenyl-5-L-phenylalaninamide (FDNP-L-Phe-NH2), or

1-fluoro-2, 4-dinitrophenyl-5-L-valinamide (FDNP-L-Val-NH2) were spotted on

precoated plates. Diastereomers of all the DL amino acids were separated most

effectively by normal-phase TLC with phenol-water, 3:1 (v/v), as

mobile phase. In reversed-phase TLC, the diastereomers were separated most effectively by use of mobile phases containing acetonitrile and

triethylamine-phosphate buffer (50 mM, pH 5.5). The results obtained by

RN

use of the classical Marfey's reagent (FDNP-L-Ala-NH2) were compared with those obtained by use of FDNP-L-Pha-RH2 and FDNP-L-Vala-NH2. The effects of buffer concentration, pH, and concentration of organic modifier were studied. This

indirect method enabled resolution of DL-amino acids at nanomolar concns.

T 194736-16-8P

RL: ANT (Analyte); PUR (Purification or recovery); SPN (Synthetic preparation); ANST (Analytical study); PREP (Preparation)

(preparation of Marfey's reagent-derivatized amino acid diastereomers and their separation via thin layer chromatog.)

194736-16-8 HCAPLUS

CN Butanoic acid, 2-[[5-[[(1S)-2-amino-1-methyl-2-oxoethyl]amino]-2,4-dinitrophenyl]amino]-, (2S)- (CA INDEX NAME)

## Absolute stereochemistry.

OS.CITING REF COUNT: 8 THERE ARE 8 CAPLUS RECORDS THAT CITE THIS RECORD
(8 CITINGS)

REFERENCE COUNT: 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 6 OF 94 HCAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2008:207093 HCAPLUS

DOCUMENT NUMBER: 148:462473

TITLE: Virtual screening approaches for the identification of

non-lipid autotaxin inhibitors

AUTHOR(S): Parrill, Abby L.; Echols, Uniqua; Nguyen, Tran; Pham,
Truc-Chi T.; Hoeglund, Adrienne; Baker, Daniel L.
CORPORATE SOURCE: Department of Chemistry, The University of Memphis,

Memphis, TN, 38152, USA

SOURCE: Bioorganic & Medicinal Chemistry (2008), 16(4),

1784-1795

CODEN: BMECEP: ISSN: 0968-0896

PUBLISHER: Elsevier Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Autotaxin (ATX, NPP-2) catalyzes the conversion of lysophosphatidyl choline (LPC) to lysophosphatidic acid (LPA), a mitogenic cell survival factor that stimulates cell motility. The high expression of both ATX and receptors for LPA in numerous tumor cell types has produced substantial interest in exploring ATX as an anticancer chemotherapeutic target. ATX inhibitors reported to date are analogs of LPA, a phospholipid, and are

more hydrophobic than is typical of orally bioavailable drugs. This study applied both structure-based and ligand-based virtual screening techniques with hit rates of 20% and 37%, resp., to identify a promising set of nonlipid, drug-like ATX inhibitors. Structure-based virtual screening necessitated development of a homol. model of the ATX catalytic domain due to the lack of structural information on any mammalian NPP family member. This model provided insight into the interactions necessary for ATX inhibition, and produced a suitably diverse training set for the development and application of binary OSAR models for virtual screening. The most efficacious compound identified in this study was able to completely inhibit ATX-catalyzed hydrolysis of 1  $\mu\text{M}$  FS-3 (a synthetic, fluorescent LPC analog) at a 10  $\mu\text{M}$  concentration 31366-29-3

IT 31356-29-3 RL: PAC (Pharmacological activity); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(virtual screening approaches for identification of non-lipid autotaxin inhibitors)

RN 31356-29-3 HCAPLUS

CN Butanoic acid, 2-[(2,4-dinitrophenyl)amino]- (CA INDEX NAME)

OS.CITING REF COUNT: 19 THERE ARE 19 CAPLUS RECORDS THAT CITE THIS

RECORD (20 CITINGS)

REFERENCE COUNT: 53 THERE ARE 53 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 7 OF 94 HCAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2007:450428 HCAPLUS

DOCUMENT NUMBER: 147:95385

TITLE: Smiles Rearrangements in Ugi- and Passerini-Type
Couplings: New Multicomponent Access to O- and

N-Arvlamides

AUTHOR(S): El Kaiem, Laurent; Gizolme, Marie; Grimaud, Laurence;

Oble, Julie

CORPORATE SOURCE: Laboratoire Chimie et procedes UMR 7652, Ecole

Nationale Superieure de Techniques Avancees, Paris,

75015, Fr.

SOURCE: Journal of Organic Chemistry (2007), 72(11), 4169-4180

CODEN: JOCEAH; ISSN: 0022-3263

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 147:95385

AB The use of Smiles rearrangement in Ugi- and Passerini-type couplings with electron-deficient phenols allowed very straightforward multicomponent formation of O-aryl- and N-arylamides. Best yields were observed with the highly activated o- and p-nitrophenols, salicylic derivs. giving adducts

in lower yields. The scope of these new reactions was further increased

by the successful couplings of heterocyclic phenols such as hydroxypyridines and hydroxypyrimidines.

876013-60-4P

RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of 0- and N-arylamides via Smiles rearrangements in multicomponent Ugi- and Passerini-type couplings of phenols with carbonvl compds., amines and isocvanides)

RN 876013-60-4 HCAPLUS

Butanamide, 2-[[(4-chlorophenyl)methyl](4-nitrophenyl)amino]-N-cyclohexyl-CN (CA INDEX NAME)

OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

REFERENCE COUNT: 88 THERE ARE 88 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 8 OF 94 HCAPLUS COPYRIGHT 2010 ACS on STN

2007:420235 HCAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER: 147:72710

TITLE: Novel Series of Potent, Nonsteroidal, Selective Androgen Receptor Modulators Based on

7H-[1,4]oxazino[3,2-g]quinolin-7-ones

AUTHOR(S): Higuchi, Robert I.; Arienti, Kristen L.; Lopez, Francisco J.; Mani, Neelakhanda S.; Mais, Dale E.;

Caferro, Thomas R.; Long, Yun Oliver; Jones, Todd K.; Edwards, James P.; Zhi, Lin; Schrader, William T.;

Negro-Vilar, Andres; Marschke, Keith B.

Discovery Research, Ligand Pharmaceuticals, Inc., San CORPORATE SOURCE:

Diego, CA, 92121, USA

SOURCE: Journal of Medicinal Chemistry (2007), 50(10),

2486-2496

CODEN: JMCMAR; ISSN: 0022-2623

PUBLISHER: American Chemical Society DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 147:72710

GI

AB Recent interest in orally available androgens has fueled the search for new androgens for use in hormone replacement therapy and as anabolic agents. In pursuit of this, a series of novel androgen receptor modulators, 7H-[1,4]oxazino[3,2-g]quinolin-7-ones I (R1 = H, Me, Et, Me2CH, F3CCH2, cyclopropylmethyl, PhCH2, etc.; R2 = H, Me, Et, Me2CH, Me2CHCH2; R3 = H, Me, Et), were synthesized and evaluated in competitive binding assays and an androgen receptor transcriptional activation assay. A number of compds. from the series demonstrated single-digit nanomolar agonist activity in vitro. In addition, lead compound (R)-I (R1 = F3CCH2; R2 = Me; R3 = H) was orally active in established rodent models that measure androgenic and anabolic properties of these agents. In this assay, this compound demonstrated full efficacy in muscle and only partially stimulated the prostate at 100 mg/kg. These data suggest that these compds. may be utilized as selective androgen receptor modulators or SARMs. 329229-75-6P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of 7H-[1,4]oxazino[3,2-g]quinolin-7-ones as nonsteroidal selective androgen receptor modulators)

RN 329229-75-6 HCAPLUS

CN 1-Butanol, 2-[(2-fluoro-4-nitrophenyl)amino]-, (2R)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

OS.CITING REF COUNT: 16 THERE ARE 16 CAPLUS RECORDS THAT CITE THIS

RECORD (16 CITINGS)

REFERENCE COUNT: 36 THERE ARE 36 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 9 OF 94 HCAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2007:78981 HCAPLUS

DOCUMENT NUMBER: 147:202511

TITLE: Capillary zone electrophoresis resolutions of

2,4-dinitrophenyl labeled amino acids enantiomers by

N-methylated amino-β-cyclodextrins

AUTHOR(S): Mikus, Peter; Kaniansky, Dusan

CORPORATE SOURCE: Department of Pharmaceutical Analysis and Nuclear

Pharmacy, Faculty of Pharmacy, Comenius University,

Bratislava, Slovakia

SOURCE: Analytical Letters (2007), 40(2), 335-347

CODEN: ANALBP; ISSN: 0003-2719

PUBLISHER: Taylor & Francis, Inc.

DOCUMENT TYPE: Journal LANGUAGE: English

AB Capillary zone electrophoresis resolns. of 2,4-dinitrophenyl labeled amino acids (DNP-AAs) enantiomers using three N-methylated

amino- $\beta$ -cyclodextrins (CDs) [6I-deoxy-6I-monomethylamino- $\beta$ -CD (M-A- $\beta$ CD), 6I-deoxy-6I-dimethylamino- $\beta$ -CD (diM-A- $\beta$ CD),

 $(M-A-\beta CD)$ , of-deoxy-of-dimethylamino- $\beta$ -cyclodextrin (triM-A- $\beta$ CD)] as

chiral selectors were studied. These cationogenic selectors, differing in ionization and steric properties, exhibited clear differences in their enantioselectivities. The differences in enantioresolm. Observed under identical acid-base conditions (pH 5.2), providing comparable effective charges/mobilities of the CDs, e.g., excellent sepns. of single

enantiomeric couples (triM-A- $\beta$ CD, M-A- $\beta$ CD), multicomponent mixts. of enantiomers (M-A- $\beta$ CD), and mixts. of positional isomers

(M-A- $\beta$ CD, diM-A- $\beta$ CD), indicated the importance of structural parameters (different degrees of methylation) of the studied chiral

selectors in the separation mechanism. The differences in enantioresoln.

under various acid base conditions (pH 5.2 and 9.6), providing significant differences of effective charges/mobilities of CDs, e.g., a drematic decrease in enantioresoln. as well as achiral resolution with uncharged M-A-PCD and preserved resolution with permanently charged triM-A-PCD, indicated the importance of charge of the studied chiral selectors in the separation mechanism. The present study clearly showed that the studied CD derivs. have great potential as chiral selectors in

capillary zone electrophoresis sepns of DNP-Ahs and that their effective use is related to the character of the analyte (structure, hydrophobicity) as well as to working conditions (pH).

IT 4470-69-3, 2,4-Dinitrophenyl-L- $\alpha$ -amino-n-butyric acid RL: ANT (Analyte); ANST (Analytical study)

(analyte; capillary zone electrophoresis resolns. of dinitrophenyl labeled amino acids enantiomers by N-methylated

amino-β-cyclodextrins)

RN 4470-69-3 HCAPLUS

CN Butanoic acid, 2-[(2,4-dinitrophenyl)amino]-, (2S)- (CA INDEX NAME)

## Absolute stereochemistry.

OS.CITING REF COUNT: 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD
(4 CITINGS)

REFERENCE COUNT: 25 THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 10 OF 94 HCAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2006:759295 HCAPLUS

DOCUMENT NUMBER: 145:356744

Direct Access to Heterocyclic Scaffolds by New

Multicomponent Ugi-Smiles Couplings

AUTHOR(S): El Kaim, Laurent; Gizolme, Marie; Grimaud, Laurence;

Oble, Julie

CORPORATE SOURCE: Laboratoire Chimie et Procedes, Ecole Nationale

Superieure de Techniques Avancees, Paris, 75739, Fr.

SOURCE: Organic Letters (2006), 8(18), 4019-4021 CODEN: ORLEF7; ISSN: 1523-7060

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

CASREACT 145:356744 OTHER SOURCE(S):

New heterocyclic scaffolds can be easily prepared by the coupling of heteroarom. phenols (pyridines, pyrimidines) with carbonyl compds., amines, and isocyanides. This transformation related to the Ugi reaction probably involves a Smiles rearrangement. The scope of this methodol, is further extended by the successful use of heterocyclic thiols to form highly functionalized thioamides.

910311-46-5P

RL: SPN (Synthetic preparation); PREP (Preparation)

(direct access to heterocyclic scaffolds by multicomponent Uqi-Smiles couplings)

RN

910311-46-5 HCAPLUS
Butanamide, N-(1,1-dimethylethyl)-2-[(5-nitro-2-pyridinyl)-2-propen-1-CN ylamino] - (CA INDEX NAME)

OS.CITING REF COUNT: 21 THERE ARE 21 CAPLUS RECORDS THAT CITE THIS

RECORD (21 CITINGS)

REFERENCE COUNT: THERE ARE 33 CITED REFERENCES AVAILABLE FOR THIS 33 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 11 OF 94 HCAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2006:383697 HCAPLUS

DOCUMENT NUMBER: 144:432552

TITLE: Preparation of substituted anilines as selective androgen receptor modulators

INVENTOR(S): Turnbull, Philip Stewart; Larkin, Andrew Lamont;

Kaldor, Istvan; Cadilla, Rodolfo; Cowan, David John;

Stewart, Eugene Lee

PATENT ASSIGNEE(S): Smithkline Beecham Corporation, USA

SOURCE: PCT Int. Appl., 134 pp. CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE:

English

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

E		ENT I					_				APPL						ATE	
- V		2006				A1		2006									0051	
		W:							AZ,									
									DK,									
									IL,									
									LV,									
									PG,									
									TN,									
				ZA,			10,	,	2117		/	10,	011,	00,	00,	02,	,	,
		RW:					CY.	CZ.	DE.	DK.	EE.	ES.	FT.	FR.	GB.	GR.	HU.	TE.
	RW: AT, BE, BG IS, IT, LT																	
	IS, IT, L CF, CG, C																	
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											WU Z	005-	0557	094		n 2	0021	013

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT OTHER SOURCE(S): CASREACT 144:432552; MARPAT 144:432552 GI

This invention relates to non-steroidal compds. I [R1 = CN or NO2; R2 =AB independently CN, NO2, halo, etc.; R3 = H, (cyclo)alkyl, alkoxycarbonylalkyl, etc.; R4, R5 = independently H, (cyclo)alkyl, halo, etc., or R4R5 = (un)substituted (hetero)cyclyl; Y = (un)substituted

methylene(oxy), methylenethio, carbonylamino, etc.;  $A = (\text{hetero}) \operatorname{aryl}$  or heterocyclyl; m = 0-2; n = 0-5; R6 = independently ( $\text{halo}) \operatorname{alkyl}$ , halo, hydroxy, etc.] which are or are believed to be modulators of androgen, glucocorticoid, mineralocorticoid, and progesterone receptors, and also to the methods for the making and use of such compds. For example, II was provided in a multi-step synthesis starting from the reaction of 4-fluoro-2-(trifluoromethyl) benzonitrile with 1-cyclopropylmethanamine. The compds. I are claimed to be useful in the treatment or prophylaxis of conditions or disorders that respond to selective androgen receptor modulation (no data qiven).

IT 884854-99-3P, 2-[[4-Cyano-3-(trifluoromethyl)phenyl](2,2,2trifluoroethyl)amino]-N-phenylbutanamide
Rl: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
(Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
(Uses)

(preparation of substituted aniline derivs. as selective androgen receptor modulators)

RN 884854-99-3 HCAPLUS

CN Butanamide, 2-[[4-cyano-3-(trifluoromethyl)phenyl](2,2,2-trifluoroethyl)aminol-N-phenyl- (CA INDEX NAME)

REFERENCE COUNT:

OS.CITING REF COUNT:

THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD (4 CITINGS)

(4 CITINGS)

14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 12 OF 94 HCAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 2005:1345737 HCAPLUS

DOCUMENT NUMBER: 144:212475

TITLE: Phenol Ugi-Smiles systems: strategies for the multicomponent N-arylation of primary amines with

isocyanides, aldehydes, and phenols
AUTHOR(S): El Kaim, Laurent; Grimaud, Laurence; Oble, Julie

CORPORATE SOURCE: Laboratoire de Chimie Organique, UMR CNRS 7652, Ecole Nationale Superieure des Techniques Avancees, Paris, 75015, Fr.

SOURCE: Angewandte Chemie, International Edition (2005), 44(48), 7961-7964

CODEN: ACIEF5; ISSN: 1433-7851

PUBLISHER: Wiley-VCH Verlag GmbH & Co. KGaA
DOCUMENT TYPE: Journal

.....

RN

LANGUAGE: OTHER SOURCE(S): GI English CASREACT 144:212475

I

O NH Et O2N

AB A Smiles rearrangement is the key step in the efficient coupling of primary amines with isocyanides, carbonyl compds, and electron-deficient substituted phenols to form N-aryl amines. E.g., reaction of EtCHO, 4-CLCGH4CHNE2, cyclohexyl isocyanide, and 2-O2NOGH4OH gave 74% aryl amine I. The presence of a nitro or ester group on the resulting adduct allows applications in heterocyclic synthesis.

IT 876013-60-4P

8/6013-60-4P RL: SPN (Synthetic preparation); PREP (Preparation) (multicomponent N-arylation of primary amines with isocyanides, carbonyl compds., and phenols) 876013-60-4 HCAPLUS

CN Butanamide, 2-[[(4-chlorophenyl)methyl](4-nitrophenyl)amino]-N-cyclohexyl-(CA INDEX NAME)

NO<sub>2</sub>

C1

Et 0

CH<sub>2</sub>-N-CH-C-NH

OS.CITING REF COUNT: 24 THERE ARE 24 CAPLUS RECORDS THAT CITE THIS
RECORD (24 CITINGS)

REFERENCE COUNT: 29 THERE ARE 29 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 13 OF 94 HCAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2005:1042201 HCAPLUS
DOCUMENT NUMBER: 143:326203

TITLE: Arylamines as androgen receptor modulators, their preparation, pharmaceutical compositions, and use in therapy

 Miller, Todd

PATENT ASSIGNEE(S): Ligand Pharmaceuticals Incorporated, USA

SOURCE: PCT Int. Appl., 156 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION:

PATE	PATENT NO.						DATE			APPL	ICAT	ION I	NO.		D	ATE	
						-											
WO 2	005	0902	82		A1		2005	0929		WO 2	005-1	US78	67		2	0050	311
	W:	ΑE,	AG,	AL,	AM,	AT,	AU,	AZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,
		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,
		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KP,	KR,	KZ,	LC,
		LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NA,	NI,
		NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SM,
	SY, TJ, TM,		TM,	TN,	TR,	TT,	TZ,	UA,	UG,	UZ,	VC,	VN,	YU,	ZA,	ZM,	zw	
	RW:	BW,	GH,	GM,	KE,	LS,	MW,	ΜZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,
		ΑZ,	BY,	KG,	KZ,	MD,	RU,	ΤJ,	TM,	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,
		EE,	ES,	FI,	FR,	GB,	GR,	HU,	ΙE,	IS,	IT,	LT,	LU,	MC,	NL,	PL,	PT,
		RO,	SE,	SI,	SK,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,
	MR, NE, SN				TD,	TG											
US 2	US 20070254875						2007	1101		US 2	007-	5901	19		2	0070	611
PRIORITY .	RIORITY APPLN. INFO.:									US 2	004-	5526	90P	1	P 2	0040	312
										WO 2	005-1	US78	67	1	W 2	0050	311

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OTHER SOURCE(S): CASREACT 143:326203: MARPAT 143:326203

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

The invention relates to a group of amines, e.g., I, which act as modulators of androgen receptors and/or androgen receptor binding agents. In compds. I, R1 and R2 are independently selected from H, F, C1, Br, I, OH, (un)substituted C1-4 alkoxy, etc.; R3, R4, and R5 are independently selected from H, F, Cl, OH, (un)substituted Cl-4 alkoxy, (un)substituted C1-4 alkyl, and (un)substituted C1-4 haloalkyl; R6 and R7 are independently selected from H, (un) substituted C1-6 alkyl, (un) substituted C1-6 haloalkyl, (un)substituted C1-6 heteroalkyl, (un)substituted C2-6 alkynyl, and (un)substituted C2-6 alkenyl, or R6 and R7 together form a carbonvl; R9 is selected from H, (un)substituted C1-8 alkvl, (un) substituted C2-8 alkenyl, (un) substituted C1-8 haloalkyl, (un) substituted aryl, (un) substituted heteroaryl, etc.; R10 is selected from H, (un) substituted C1-6 alkyl, (un) substituted C1-6 haloalkyl, (un) substituted C1-6 heteroalkyl, (un) substituted C2-6 alkynyl, and (un) substituted C2-6 alkenyl; R12 and R13 are independently selected from H, F, C1, OH, (un)substituted C1-4 alkoxy, (un)substituted amino, (un)substituted C1-6 alkyl, etc.; Z is O, S, (un)substituted C, or (un)substituted N; and n is 0-2; provided that if R1 is NO2 and R3 is F, then Z is not O; including pharmaceutically acceptable salts, esters, amides or prodrugs thereof. The invention also relates to the preparation of the compds. of the invention, pharmaceutical compns. containing compds. of the invention along with a pharmaceutically acceptable carrier, as well as to the use of the compns. for treating various conditions.

3-(Trifluoromethyl)-4-nitrobromobenzene underwent palladium-mediated coupling with chiral pyrrolidinone II followed by reduction to the

corresponding pyrrolidine, and desilylation to give alc. III. Oxidation of III to the corresponding aldehyde was followed by addition of TMSCF3 to give IV along with its separable (R,R)-diastereomer. Some of the compds. of the invention act as androgen receptor agonists, others as androgen

receptor antagonists, androgen receptor partial agonists, or

tissue-specific modulators (no data). 865316-59-2P, 3-Fluoro-4-[(1-

hydroxymethylpropyl)amino|benzonitrile

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(intermediate; preparation of arylamines as androgen receptor modulators) RM 865316-59-2 HCAPLUS CN

Benzonitrile, 3-fluoro-4-[[1-(hydroxymethyl)propyl]amino]- (CA INDEX NAME)

OS.CITING REF COUNT: 6 THERE ARE 6 CAPLUS RECORDS THAT CITE THIS RECORD

(7 CITINGS)

REFERENCE COUNT: 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 14 OF 94 HCAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2005:1004698 HCAPLUS

DOCUMENT NUMBER: 143:286689

TITLE: Preparation of aniline amino acid derivatives as

selective androgen receptor modulators

INVENTOR(S): Turnbull, Phillip Stewart; Cadilla, Rodolfo; Cowan, David John; Larkin, Andrew Lamont; Kaldor, Istvan;

Stewart, Eugene Lee

PATENT ASSIGNEE(S): Smithkline Beecham Corporation, USA

SOURCE: PCT Int. Appl., 120 pp.

CODEN: PIXXD2 Patent

English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

DOCUMENT TYPE:

LANGUAGE:

PA:	TENT	NO.			KIN	D	DATE			APPL	ICAT	ION :	NO.		D	ATE	
						-											
WO	2005	0851	85		A1		2005	0915		WO 2	005-	US72	45		2	0050	303
	W:	ΑE,	AG,	AL,	AM,	AT,	AU,	AZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,
		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,
		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KP,	KR,	ΚZ,	LC,
		LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NA,	NI,

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NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM,
            SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
        RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,
            AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,
            EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT,
            RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML,
            MR, NE, SN, TD, TG
                              20061129
                                         EP 2005-730067
                        A1
        R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
            IS, IT, LI, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, HR, LV
    JP 2007526336
                        T
                             20070913
                                         JP 2007-502061
    US 20070191479
                        A1
                              20070816
                                          US 2006-598508
                                                                 20060901
    US 7514470
                        B2
                              20090407
    US 20090163588
                        A1
                              20090625
                                         US 2009-392687
                                                                 20090225
    US 7723385
                        B2
                              20100525
PRIORITY APPLN. INFO.:
                                                            P 20040303
                                          US 2004-549794P
                                                             W 20050303
                                          WO 2005-US7245
                                          US 2006-598508
                                                             A1 20060901
ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
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OTHER SOURCE(S): CASREACT 143:286689; MARPAT 143:286689

The invention relates to non-steroidal compds. 3,4-R4R3C6H3NR1R2 [R1 is -(Q1)0-1-R5, where Q1 is alkylene and R5 is H, alkyl, alkenyl, alkynyl, haloalkyl or cycloalkyl; R2 is -Q3-Q4-R6 or -Q3-CN, where Q3 is alkylene, Q4is CO, CS, C:NR7, R7 is H or alkyl; R6 is alkyl, alkenyl, alkynyl, hydroxy, alkoxy, aryloxy or an amino group; R3 is CN, NO2 or halo; R4 is CN, NO2, halo, haloalkyl, alkyl, alkenyl, alkynyl, hydroxy, alkoxy, aryl or aryloxy] and their salts, solvates and physiol. functional derivs., that are modulators of androgen, glucocorticoid, mineralocorticoid, and progesterone receptors, as well as methods for their synthesis and use. Thus, N2-[4-cyano-3-(trifluoromethyl)phenyl]-N2-(cyclopropylmethyl)-N1methylglycinamide was prepared from 4-fluoro-2-(trifluoromethyl)benzonitrile by reaction with cyclopropylmethylamine and tert-Bu bromoacetate, followed by ester cleavage and methylamidation.

864283-71-6P

RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(preparation of aniline amino acid derivs. as selective androgen receptor modulators)

RN 864283-71-6 HCAPLUS

CN Butanoic acid, 2-[[4-cyano-3-(trifluoromethyl)phenyl](2,2,2trifluoroethyl)amino]- (CA INDEX NAME)

OS.CITING REF COUNT: 5 THERE ARE 5 CAPLUS RECORDS THAT CITE THIS RECORD

(6 CITINGS)

REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 15 OF 94 HCAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2003:511102 HCAPLUS

DOCUMENT NUMBER: 139:73719

TITLE: Oxidative hair dyes containing N-alkyl derivatives of

p-benzene diamine as developers
INVENTOR(S): Knuebel, Georg; Hoeffkes, Horst; Meinigke, Bernd;

Rose, David; Giesa, Helmut

PATENT ASSIGNEE(S): Henkel Kommanditgesellschaft Auf Aktien, Germany

SOURCE: PCT Int. Appl., 49 pp.

CODEN: PIXXD2
DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION:

PATENT NO.	KIND DATE	APPLICATION NO.	DATE
WO 2003053370	A2 20030703	WO 2002-EP14292	20021216
WO 2003053370	A3 20031127		
W: JP, US			
		DK, EE, ES, FI, FR,	GB, GR, IE, IT,
LU, MC, NL,	PT, SE, SI, SK,	TR	
DE 10163251	A1 20030703	DE 2001-10163251	20011221
EP 1455741	A2 20040915	EP 2002-793025	20021216
R: AT, BE, CH,	DE, DK, ES, FR,	GB, GR, IT, LI, LU,	NL, SE, MC, PT,
IE, SI, LT,	LV, FI, RO, MK,	CY, AL, TR, BG, CZ,	EE, SK
PRIORITY APPLN. INFO.:		DE 2001-10163251	A 20011221
		WO 2002-EP14292	W 20021216
		WO 2002-EP14292	W 20021216

OTHER SOURCE(S): MARPAT 139:73719

B The invention relates to means for coloring keratin fibers, in particular human hair, comprising at least one N-alkyl derivative of p-phenylenediamine in a cosmetically-acceptable vehicle, where alkyl = a linear or branched, chiral or achiral C4 - C14 hydroxyalkyl group. The invention further relates to the use of the derivs. for the coloring of keratin fibers and a corresponding method. Thus N-(5-hydroxypentyl)-p-phenylene diamine dihydrochloride was synthesized by reacting 5-amino-1-pentanol and 1-fluoro-4-nitrobenzene in DMSO and triethylamine, followed by catalytic reduction The product was used as a developer with resorcin as coupler to result a dust gray color.

IT 220159-25-1P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(oxidative hair dyes containing N-alkyl derivs. of p-benzene diamine as developers)

RN 220159-25-1 HCAPLUS

CN 1-Butanol, 2-[(4-nitrophenyl)amino]- (CA INDEX NAME)

сн2-он

NH-CH-Et

O<sub>2</sub>N

OS.CITING REF COUNT: 9 THERE ARE 9 CAPLUS RECORDS THAT CITE THIS RECORD

(9 CITINGS)

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 16 OF 94 HCAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2003:397213 HCAPLUS

DOCUMENT NUMBER: 139:149559

TITLE: Palladium-Catalyzed Synthesis of N-Aryloxazolidinones from Aryl Chlorides

AUTHOR(S): Ghosh, Arun; Sieser, Janice E.; Riou, Maxime; Cai,

Weiling; Rivera-Ruiz, Luis

CORPORATE SOURCE: Process Research and Development, Pfizer Global Research and Development, Groton, CT, 06340-8013, USA

SOURCE: Organic Letters (2003), 5(13), 2207-2210

CODEN: ORLEF7; ISSN: 1523-7060
PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English
OTHER SOURCE(S): CASREACT

OTHER SOURCE(S): CASREACT 139:149559

AB An efficient method for intermol. N-arylation of oxazolidinones using

Pd2dba3 and various phosphine ligands in the presence of a weak base is reported. The conditions allow the use of cheaper aryl chlorides containing functionalities such as enolizable ketones, amides, etc., which would be incompatible with other coupling methods. The coupling reaction can be used to prepare enantiopure N-aryl B-amino alcs. Depending on the stereoelectronic nature of the aryl chloride, careful choice of ligand was

necessary for the success of these reactions. IT 572923-29-6P

RL: SPN (Synthetic preparation); PREP (Preparation)
(palladium-catalyzed synthesis of N-aryloxazolidinones from aryl

chlorides and hydrolysis to arylamino alcs.)
N 572923-29-6 HCAPLUS

CN Benzonitrile, 4-[[(1S)-1-(hydroxymethyl)propyl]amino]- (CA INDEX NAME)

Absolute stereochemistry.

OS.CITING REF COUNT: 35 THERE ARE 35 CAPLUS RECORDS THAT CITE THIS RECORD (35 CITINGS)

REFERENCE COUNT: 46 THERE ARE 46 CITED REFERENCES AVAILABLE FOR THIS

## RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 17 OF 94 HCAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2003:259734 HCAPLUS DOCUMENT NUMBER:

138:271683

TITLE:

Preparation of

2-(acvlamino)-5-(benzenesulfonvloxy)benzimidazole compounds and their use for the treatment of cancer

INVENTOR(S): Clerc, Francois; Hamy, Francois; Depaty, Isabelle;

Angouillant-Boniface, Odile; Roesner, Manfred

PATENT ASSIGNEE(S): Aventis Pharma S.A., Fr. SOURCE:

Eur. Pat. Appl., 31 pp.

CODEN: EPXXDW Patent

DOCUMENT TYPE: LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION:

PA:	ENT	NO.			KIN	D	DATE			APPI	LICAT	ION :	NO.		D	ATE	
EP	1298	125			A1		2003	0402		EP 2	2001-	4024	60		2	0010	926
	R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,
		IE,	SI,	LT.	LV.	FI.	RO.	MK.	CY,	AL.	TR						
CA	2461	622			A1		2003	0410		CA 2	2002-	2461	622		2	0020	926
ĊA	2461 2461	622			Ċ		2008	1202									
WO	2003	0287	21		A2		2003	0410		WO 2	2002-	EP11	353		2	0020	926
WO	2003	0287	21		A3		2003	1211									
	W:	AE.	AG.	AL.	AM.	AT.	AU.	AZ.	BA.	BB.	BG,	BR.	BY.	BZ.	CA.	CH.	CN.
		co,	CR.	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FI,	GB,	GD,	GE,	GH,
		GM.	HR.	HU,	ID.	IL.	IN.	IS.	JP,	KE.	KG,	KP.	KR.	KZ.	LC.	LK.	LR.
											MW,						
		PL,	PT.	RO.	RU,	SD,	SE.	SG,	SI,	SK,	SL,	TJ,	TM,	TN.	TR.	TT,	TZ,
		UA.	UG,	US,	UZ.	VC.	VN.	YU,	ZA.	ZM.	ZW					,	,
	RW:	GH.	GM.	KE.	LS.	MW.	MZ.	SD.	SL.	SZ.	TZ.	UG.	ZM.	ZW.	AM.	AZ.	BY,
		KG,	KZ,	MD,	RU,	TJ,	TM,	AT.	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,
		FI.	FR.	GB,	GR.	IE.	IT.	LU.	MC.	NL.	PT,	SE.	SK.	TR.	BF.	BJ,	CF.
		CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	TG			
AU	2002	3371	51		A1		2003	0414		AU 2	2002-	3371	51		2	0020	926
AU	2002	3371	51		B2		2007	0426									
EP	2002 2002 1432 1432	417			A2		2004	0630		EP 2	2002-	7723	70		2	0020	926
EP	1432	417			B1		2008	0220									
	R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,
		ΙE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	AL,	TR,	BG,	CZ,	EE,	SK		
BR	2002	0128	56		A		2004	0914		BR 2	2002-	1285	6		2	0020	926
CN	1558	761			A		2004	1229		CN 2	2002-	8187	45		2	0020	926
CN	1003	4678	6		С		2007	1107									
HU	2002 1558 1003 2004	0017	56		A2		2005	0128		HU 2	2004-	1756			2	0020	926
HU	2004	0017	56		A3		2005	0628									
JP	2005	5041	12		T		2005	0210		JP 2	2003-	5320	53		2	0020	926
JP	4510	450			B2		2010	0721									
NZ	5312	46			A		2006	0630		NZ 2	2002-	5312	46		2	0020	926
AT	3865	17			T		2008	0315		AT 2	2002-	7723	70		2	0020	926
PT	2004 2005 4510 5312 3865 1432	417			Ε		2008	0523		PT 2	2002-	7723	70		2	0020	926
ES	2301	682			13		2008	0./01		E5 2	2002-	1123	/ U		2	UUZU	926
MX	2004	0020	42		A		2004	0607		MX 2	2004-	2042			2	0040	303
ZA	2004	0018	87		A		2005	0531		ZA 2	2004-	1887			2	0040	308

NO 20040012	14 A	20040624	NO	2004-1214		20040323
NO 327008	B1	20090406				
IN 2004CN00	600 A	20060113	IN	2004-CN600		20040323
IN 227958	A1	20090306				
US 20050014	811 A1	20050120	US	2004-808889		20040325
US 7041668	B2	20060509				
HR 20040002	93 A2	20050630	HR	2004-293		20040325
KR 891439	B1	20090403	KR	2004-704365		20040325
HK 1068551	A1	20080201	HK	2005-101028		20050207
PRIORITY APPLN.	INFO.:		EP	2001-402460	A	20010926
			WO	2002-EP11353	W	20020926
OTHER SOURCE(S):	MARPAT	138:271683				

New benzimidazole compds. of formula (I) [wherein R1 = 4-NH2, 4-alkylamino or cycloalkylamino eventually substituted with an acyl or its derivative, hydroxy, amino, alkoxy, heterocyclyl, or aryl group; R2 = (1) alkyl eventually substituted by amino, acid, acid derivative, alkoxy, aryl or OH groups, (2) arylalkyl eventually substituted by alkoxy, halogeno, amino, acid or acid derivs., (3) alkoxy eventually substituted by aryl, (4) amino, NHR3, or NR3R4 (wherein R3, R4 = H, alkyl, alkylaryl, aryl or together form an alkylene chain)] or pharmaceutically acceptable salts thereof, which are useful for treating cancer diseases, are prepared These compds. I are inhibitors of cyclin-dependent kinases (CKDs, in particular CDK4) which are regulators for progression of the cell cycle at cell cycle checkpoints, and are effective in inhibiting the proliferation of neoplastic cells. Thus, 15.6 g 2-amino-5-(4fluorophenylsulfonyloxy)nitrobenzene were combined with 25 mL ethanolamine

in 100 mL ethylene glycol in a round bottom flask and heated to reflux for 90 min to give, after workup, 15.5 g 2-amino-5-[4-(2-hydroxyethyl)aminophenylsulfonyloxy]nitrobenzene (II). II

(15.5 g) in 75 mL MeOH and 75 mL DMF were hydrogenated under atmospheric pressure

with a catalytic amount of Ranev Nickel, filtered to remove the catalyst followed by washing the catalyst with MeOH. The filtrate and the washing were combined, concentrated under reduced pressure, taken up in 150 mL MeOH and 30 mL glacial acetic acid, treated with 10.3 g 1,3-bis(methoxycarbonyl)-2-methyl-2-thiopseudourea, and heated to reflux with stirring for 3 h to give, after crystallization from methanol, 7.4 g Me 5-[4-(2-hvdroxvethv1)aminophenvlsulfonvloxv]benzimidazole-2-carbamate (III). III and Me 5-(4-aminophenylsulfonyloxy)benzimidazole-2-carbamate showed IC50 of 1.43 and 0.28 µM, resp., against CDK4/CyclionD1 kinase.

503545-69-5P RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of 2-(acvlamino)-5-(benzenesulfonvloxy)benzimidazole compds. as inhibitors of cyclin-dependent kinases for treatment of cancer)

RM 503545-69-5 HCAPLUS

CN Benzenesulfonic acid, 4-[[1-(hydroxymethyl)propyl]amino]-,

2-[(methoxycarbonyl)amino]-1H-benzimidazol-6-yl ester (CA INDEX NAME)

HO-CH2

Et-CH-NH

OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 18 OF 94 HCAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2002:676021 HCAPLUS

DOCUMENT NUMBER: 137:201318

TITLE: Preparation of tricyclic quinolinone androgen receptor

modulator compounds

INVENTOR(S): Higuchi, Robert I.; Zhi, Lin; Karanewsky, Donald S.;

Thompson, Anthony W.; Caferro, Thomas R.; Mani,

Neelakandha S.; Chen, Jyun-Hung; Cummings, Marquis L.;

Edwards, James P.; Adams, Mark E.; Deckhut, Charlotte L. F.

PATENT ASSIGNEE(S): Ligand Pharmaceuticals Incorporated, USA

SOURCE: PCT Int. Appl., 142 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PA:	ENT :	NO.			KIN	D	DATE			APPL	ICAT	ION :	NO.		D.	ATE	
						_											
WO	2002	0684	27		A1		2002	0906		WO 2	002-	IB53	8		2	0020	223
	W:	ΑE,	AG,	AL,	AM,	AT,	AU,	AZ,	BA,	BB,	BG,	BR,	BY,	BZ,	CA,	CH,	CN,
		CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FI,	GB,	GD,	GE,	GH,
		GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KΕ,	KG,	KP,	KR,	ΚZ,	LC,	LK,	LR,
		LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	ΜZ,	NO,	NZ,	OM,	PH,
		PL,	PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL,	ТJ,	TM,	TN,	TR,	TT,	TZ,
		UA,	UG,	US,	UZ,	VN,	YU,	ZA,	ZM,	zw							
	RW:	GH,	GM,	KΕ,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	ΑT,	BE,	CH,
		CY,	DE,	DK,	ES,	FΙ,	FR,	GB,	GR,	IE,	IT,	LU,	MC,	NL,	PT,	SE,	TR,
		BF,	ΒJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	TG
US	2002	0183	83314 A1 2002120							US 2	002-	8050	3		2	0020	222
US	7214	690			B2		2007	0508									
CA	2434	727			A1		2002	0906		CA 2	002-	2434	727		2	0020	223

AU	20022	2361:	15		A1	- 1	2002	0912	A	U	20	02-	2361	115			2	0020	223
EP	13683	357			A1	- 2	2003	1210	E	P	20	02-	7025	90			2	0020	223
	R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GF	۲,	IT,	LI,	LU,	NL,	SI	Ξ,	MC,	PT,
		IE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	AΙ	.,	TR							
BR	20020	075	43		A	- 2	2004	0427	В	R	20	02-	7543	3			2	0020	223
CN	14928	372			A	- 1	2004	0428	С	N	20	02-	8055	529			2	0020	223
JP	20045	243	17		T		2004	0812	J	P	20	02-	5679	37			2	0020	223
IN	20031	N012	286		A	- 2	2005	0527	I	N	20	03-	DN12	286			2	0030	813
IN	23305	9			A1	- 2	2009	0403											
MX	20030	0742	22		A	- 2	2003	1204	M	ΙX	20	03-	7422	2			2	0030	819
US	20070	072	349		A1	- 2	2007	0329	U	S	20	06-	6012	251			2	0061	117
US	20080	3002	241		A9	- 1	2008	1204											
PRIORIT	Y APPI	N. :	INFO	. :					U	S	20	01-	2711	115P		Ρ	2	0010	223
									U	S	20	02-	8050	)3		A1	2	0020	222
									W	О	20	02-	IB53	88		W	2	0020	223

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT OTHER SOURCE(S):

MARPAT 137:201318
GI

AB Title compds. I [R1 = H, F, C1, Br, I, NO2, etc.; R2 = H, F, C1, Br, I, CF3, CF2Cl, CF2H, etc., R3-4 = H, alkoxy, SOO-2, amino, alkyl, haloalkyl, heteroalkyl, cycloalkyl, aryl, arylalkyl, heteroaryl, alkynyl, etc., or R3-4 taken together form a 3-8 membered (un)saturated (hetero)cyclic ring or R3, R5 taken together form a 3-8 membered (un)saturated ring or R3, R6 taken together form a 3-8 membered (un)saturated ring; R5-6 = H, CF3, CF2C1, CF2H, CFH2, alkyl, haloalkyl, heteroalkyl, cycloalkyl, aryl, arylalkyl, heteroaryl, alkynyl, alkenyl, etc.; R7 = H, F, C1, Br, I, alkyl, haloalkyl, heteroalkyl, aryl, heteroaryl, alkoxy, etc.; R8 = H, F, C1, Br, I, alkyl, haloalkyl, heteroalkyl, aryl, heteroaryl, alkoxy, etc.; m = 0-2; W = O, SOO-2, N(H, alkyl, etc.,); X, Z = O, SOO-2, NH, etc.; Y = O, S, N(H, alkyl, etc.,), etc.] were prepared Over 50 synthetic examples were provided. For instance, 5-chloro-1,3-phenylenediamine was reacted with 4.4.4-trifluoroacetoacetate in EtOH at reflux for 18 h to give 5-Amino-7-chloro-3, 4-dihydro-4-hydroxy-4-(trifluoromethyl)-1H-quinolin-2one (37%). This was reduced (EtOH, KOAc, 10% Pd/C-H2, 2 h) to give 5-Amino-3, 4-dihydro-4-hydroxy-4-(trifluoromethyl)-1H-quinolin-2-one (100%). This substrate was then subjected to the following reaction sequence: i. NaNO2/H2SO4; ii. EtOAc, i-PrNH2, NBS; iii. DMF, BnBr, CsF; iv. MsOH, HOAc; v. THF, NMM, Ph3P, DIAD, (R)-Boc-alinol; vi. CH2Cl2, TFA; vii. PhMe, Pd(O)Ligand, NaOBu-t; viii. HOAc, HCl, 90°, 4 h to give II. I are agonists, partial agonists and/or antagonists for androgen receptors (AR).

 $\label{eq:continuous} \mbox{II} \qquad 329229-75-6P, \quad \mbox{(R)-(+)-2-[[2-Fluoro-4-nitropheny1]amino]butanol}$ 

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(intermediate; preparation of tricyclic quinolinone androgen receptor modulator compds.)

RN 329229-75-6 HCAPLUS

CN 1-Butanol, 2-[(2-fluoro-4-nitrophenyl)amino]-, (2R)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

OS.CITING REF COUNT: 5 THERE ARE 5 CAPLUS RECORDS THAT CITE THIS RECORD (5 CITINGS)

REFERENCE COUNT: 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 19 OF 94 HCAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2001:565601 HCAPLUS DOCUMENT NUMBER: 135:297787

TITLE: Evaluation of novel dendrimer chiral stationary phases

using HPLC

AUTHOR(S): Mathews, B. T.; Beezer, A. E.; Snowden, M. J.; Hardy, M. J.; Mitchell, J. C.

CORPORATE SOURCE: Medway Sciences, Natural Resources Institute,

University of Greenwich, Chatham, ME4 4TB, UK

SOURCE: Chromatographia (2001), 53(3/4), 147-155 CODEN: CHRGB7; ISSN: 0009-5893

PUBLISHER: Friedrich Vieweg & Sohn Verlagsgesellschaft mbH

DOCUMENT TYPE: Journal LANGUAGE: English

AB The reversed phase chromatog, properties of the [G1]-L-glutamic acid Et

ester-AC-silica (1), [G2]-L-glutamic acid Et ester-AC-silica (2) and the [G1]-L-glutamic acid t-Bu ester-AC-silica (3) dendrimer stationary phases were evaluated. Initial studies involved the comparison between these

phases with a classic reversed phase (i.e. ODS1) by the separation of a standard

reversed phase test mixture composed of dimethylphthalate, nitrobenzene, anisole, diphenylamine and fluorene. Sepns. were achieved with comparable performance to those obtained with the conventional reversed phase (DDS1). However, the chromatog, selectivity exhibited by the dendrimer stationary phases was different from that of the ODS1 phase. On a per mol basis, the dendrimers exhibited similar (and sometimes greater) affinity for these analytes compared with the ODS1 ligand. Subsequent chromatog, expts. were conducted upon the dendrimer chiral stationary phases using chiral analytes under reversed phase and normal phase conditions. Chiral resolution was not observed

IT 31356-29-3

RL: ARU (Analytical role, unclassified); ANST (Analytical study) (evaluation of novel dendrimer chiral stationary phases by HPLC separation

STN Search

of)

RN 31356-29-3 HCAPLUS

CN Butanoic acid, 2-[(2,4-dinitrophenyl)amino]- (CA INDEX NAME)

NO2 CO2H NH-CH-Et

OS.CITING REF COUNT: 7 THERE ARE 7 CAPLUS RECORDS THAT CITE THIS RECORD

(7 CITINGS)

REFERENCE COUNT: 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 20 OF 94 HCAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2001:319860 HCAPLUS

DOCUMENT NUMBER: 134:340354

TITLE: Preparation of anthranilamides as inhibitors of cGMP

phosphodiesterase.
INVENTOR(S): Oku. Teruo: Sawada

INVENTOR(S): Oku, Teruo; Sawada, Kozo; Kuroda, Akio; Kayakiri,
Natsuko; Urano, Yasuharu; Sawada, Yuki; Mizutani,

Tsuyoshi

PATENT ASSIGNEE(S): Fujisawa Pharmaceutical Co., Ltd., Japan; Oku, Noriko;

Oku, Chikako; Oku, Tomohito

SOURCE: PCT Int. Appl., 105 pp. CODEN: PIXXD2

Patent

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND DATE	APPLICATION NO.	DATE
	A1 20010503	WO 2000-JP7308	20001019
W: AE, AG, AL,	AM, AT, AU, AZ,	BA, BB, BG, BR, BY,	BZ, CA, CH, CN,
CR, CU, CZ,	DE, DK, DM, DZ,	EE, ES, FI, GB, GD,	GE, GH, GM, HR,
HU, ID, IL,	IN, IS, JP, KE,	KG, KR, KZ, LC, LK,	LR, LS, LT, LU,
LV, MA, MD,	MG, MK, MN, MW,	MX, MZ, NO, NZ, PL,	PT, RO, RU, SD,
SE, SG, SI,	SK, SL, TJ, TM,	TR, TT, TZ, UA, UG,	US, UZ, VN, YU,
ZA, ZW			
RW: GH, GM, KE,	LS, MW, MZ, SD,	SL, SZ, TZ, UG, ZW,	AT, BE, CH, CY,
DE, DK, ES,	FI, FR, GB, GR,	IE, IT, LU, MC, NL,	PT, SE, BF, BJ,
CF, CG, CI,	CM, GA, GN, GW,	ML, MR, NE, SN, TD,	TG
PRIORITY APPLN. INFO.:		AU 1999-3652	A 19991025
OTHER SOURCE(S):	MARPAT 134:3403	5.4	

OTHER SOURCE(S): MARPAT 134:340354 GI

AB Title compds. I; [R1 = NO2, amino, cyano, haloalky1, acy1, halo, etc.; R2 = H. OH, alkowy, alky1, cycloalky1, (substituted) ary1, heterocycly1; A = alkylene; R3 = (substituted) heterocycly1, CR4R5R6; R4, R5 (substituted) carbomoy1, alky1; R4R5C = (substituted) carbomoy1-y1; R6 = H, alky11, were prepared Thus, reaction of 2-(cyclopentylamino)-5-nitrobenzoic acid with BuNH2 in DMF in the presence of 1-(3-dimethylaminoproyp1)-3-ethylcarbodimide and 1-hydroxybenzotriazole gave N-buty1-2-(cyclopentylamino)-5-nitrobenzamide. The latter inhibited human platelet CGMP phosphodiesterase with ICSO <10 nM.

IT 337360-80-2P
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use);
 BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of anthranilamides as inhibitors of cGMP phosphodiesterase) RN 337360-80-2 HCAPLUS

CN Benzamide, N-[(3-chloro-4-methoxyphenyl)methyl]-5-cyano-2-[[(1R)-1-(hvdroxymethyl)propyl]amino]- (CA INDEX NAME)

### Absolute stereochemistry.

OS.CITING REF COUNT: 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD

(4 CITINGS)

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 21 OF 94 HCAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2001:244346 HCAPLUS DOCUMENT NUMBER: 135:55146

TITLE: Separation of multicomponent mixtures of 2,4-dinitrophenyl labelled amino acids and their

enantiomers by capillary zone electrophoresis
AUTHOR(S): Mikus, Peter; Kaniansky, Dusan; Fanali, Salvatore
CORPORATE SOURCE: Department of Analytical Chemistry, Faculty of Natural
Sciences, Comenius University, Bratislava, SK-84215,

Slovakia

SOURCE: Electrophoresis (2001), 22(3), 470-477

CODEN: ELCTDN; ISSN: 0173-0835

PUBLISHER: Wiley-VCH Verlag GmbH

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The use of capillary zone electrophoresis (CZE) for the separation of a group of 33 2,4-dinitrophenvl labeled amino acids (DNP-AA), including DNP-AA racemates, DNP-L-AA enantiomers and achiral DNP-AAs, was studied.  $\alpha$ -,  $\beta$ - And  $\gamma$ -cyclodextrins (CDs) and their derivs.

(hydroxypropyl derivs. of  $\alpha$ -,  $\beta$ - and  $\gamma$ -CDs, polymeric β-CD and 6A-methylamino-β-cyclodextrin (MA-β-CD)) served as complexing agents and chiral selectors. Although native  $\alpha$ - and  $\gamma$ -CDs and their derivs. influenced the effective mobilities of the studied DNP-AAs in different ways, they generally failed to resolve enantiomers of the individual DNP-AAs. However, β-CD and all of its derivs. are effective in this respect. Of these, the best results were achieved with a pos. charged MA-B-CD and this chiral selector resolved enantiomers of ten DNP-AA racemates available for this study. However, a complete resolution of these enantiomers in one CZE run required that the effect of the chiral selector be complemented by complexing effects of polyvinyl pyrrolidone (PVP) or  $\gamma$ -CD. Complexing and chiral recognition capabilities of MA-B-CD combined with complexing effects of Y-CD and PVP provided separating conditions suitable for the CZE sepns. of multicomponent mixts. of DNP-AAs with preserved resolns. of the enantiomers. For example, a mixture consisting of 43 DNP-AA constituents was resolved using an MA-B-CD/y-CD combination

with three peak overlaps. ΤТ 4470-69-3, L-DNP-α-amino-n-butyric acid

RL: ANT (Analyte); PEP (Physical, engineering or chemical process); ANST (Analytical study); PROC (Process)

(separation of multicomponent mixts. of 2,4-dinitrophenyl labeled amino

acids and their enantiomers by capillary zone electrophoresis) 4470-69-3 HCAPLUS

CN Butanoic acid, 2-[(2,4-dinitrophenyl)amino]-, (2S)- (CA INDEX NAME)

Absolute stereochemistry.

RN

OS.CITING REF COUNT: THERE ARE 17 CAPLUS RECORDS THAT CITE THIS 17 RECORD (17 CITINGS)

32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 22 OF 94 HCAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2001:167998 HCAPLUS DOCUMENT NUMBER: 134:222717

TITLE: Preparation of androgen receptor ligands INVENTOR(S): Higuchi, Robert; Arienti, Kristen L.; Neelakandha, Mani; Pio, Barbara; Zhi, Lin; Chen, Penghui; Caferro,

Thomas R.

PATENT ASSIGNEE(S): Ligand Pharmaceuticals Incorporated, USA

SOURCE: PCT Int. Appl., 173 pp. CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION: DATENT NO

PAT	PATENT NO.								APPLICATION NO.							DATE			
	2001	0161	39					WO 2000-US23520							2	0000	825		
		CR, HU, LU, SD, YU,	CU, ID, LV, SE, ZA,	CZ, IL, MA, SG, ZW	DE, IN, MD, SI,	DK, IS, MG, SK,	AU, DM, JP, MK, SL,	DZ, KE, MN, TJ,	EE, KG, MW, TM,	ES KF MX TF	, F , K , M	I, IR, IZ,	GB, KZ, NO, TZ,	GD, LC, NZ, UA,	GE, LK, PL, UG,	GH, LR, PT, US,	GM, LS, RO, UZ,	HR, LT, RU, VN,	
	RW:	DE,	DK,	ES,	FI,	FR,	GB,	GR,	IE,	II	, L	U,	MC,	NL,	PT,	SE,	BF,	ВJ,	
CA EP EP	2383 1212 1212	077 330 330	00,	01,	A1 A1 B1	011,	2001 2002 2006	0308 0612 0419	,	CA EP	200	0-2	2383 9578	077 54	10	2	0000	825 825	
	R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GF	₹, I	Τ,	LI,	LU,	NL,	SE,	MC,	PT,	
BR US	6462	0135! 038	97		A B1		2002	0716 1008		BR US	200	10-1 10-6	1359 5486:	7 84		2	0000	825 825	
TR HU HU	2000 6462 2002 2002 2002 2003 7786 3237 2002	0005 0028 0028	07 14 14		T2 A2 A3		2002 2002 2003	1021 1228 1128		TR HU	200 200	2-5	507 2814			2	0000	825 825	
JP AU	2003 7786	5084	02		T B2		2003	0304		JP AU	200	1-5	5197 5941	05 4		2	0000	825 825	
ZA IN	2002	09 0010 MN00:						0515 0506 1104											
MX	2002 2002 1065	0020	32		A A		2002 2003 2002	0519		MX	200	2-2	2032			2	0020 0020 0020	226	
US US	2003	0186 0167	970 445		A1		2003	1002		US	200	2-2	2383 3402	63 82		2	0020	909 125	
PRIORITY	APP:	LN.	INFO	.:						US WO	200 200	0-6 J-0	5486 JS23	84 520		A3 2 W 2	9990 0000 0000 0020	825 825	

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

OTHER SOURCE(S): MARPAT 134:222717

GI

AB Title compde., e.g., I [R = H, alkyl, aryl, etc.; R1 = H, halo, alkyl, (hetero)aryl, etc.; R2 = H, alkyl, alkoxy(methyl), (hetero)aryl, etc.; R4,R5 = H, alkyl, alkoxy, (hetero)aryl, etc.; R6,R7,R13 = H, alkyl, (hetero)aryl, etc.; R8 = H, halo, alkyl, alkoxy, etc.) were prepared Thus, 2-amino-5-nitrophenol was cyclocondensed with C1CH2COC1 and the product converted in 3 steps to 7-amino-3,4-dihydro-4-methyl-2H-1,4-benzoxazine which was condensed with CFSCOCHECOZEt and the product treated with PPA to give I (R =R1 = R3-R8 = H, R2 = CF3, I3 = Me). Data for biol. activity of title compde. were given.

title compds. were given. IT 329229-75-6P

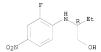
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of androgen receptor ligands)

RN 329229-75-6 HCAPLUS

CN 1-Butanol, 2-[(2-fluoro-4-nitrophenyl)amino]-, (2R)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



OS.CITING REF COUNT: 14 THERE ARE 14 CAPLUS RECORDS THAT CITE THIS

RECORD (15 CITINGS)

REFERENCE COUNT: 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 23 OF 94 HCAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2001:63979 HCAPLUS

DOCUMENT NUMBER: 134:100871

TITLE: Benzimidazolone derivatives, method of preparation and

their use as phosphodiesterase inhibitors Sawada, Kozo; Inoue, Takayuki; Sawada, Yuki; Mizutani,

INVENTOR(S): Sawada, Tsuyoshi

PATENT ASSIGNEE(S): Fujisawa Pharmaceutical Co., Ltd., Japan

SOURCE: PCT Int. Appl., 159 pp.

CODEN: PIXXD2
DOCUMENT TYPE: Patent

DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1

# PATENT INFORMATION:

									APPLICATION NO.									
								WO 2000-JP4687										
	W:	AE,	AG,	AL,	AM,	AT,	AU,	AZ,	BA,	BE	BG,	BR,	BY,	BZ,	CA,	CH,	CN,	
		CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EE,	ES	, FI,	GB,	GD,	GE,	GH,	GM,	HR,	
		HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KF	KZ,	LC,	LK,	LR,	LS,	LT,	LU,	
		LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ	, NO,	NZ,	PL,	PT,	RO,	RU,	SD,	
		SE,	SG,	SI,	SK,	SL,	TJ,	TM,	TR,	TI	, TZ,	UA,	UG,	US,	UZ,	VN,	YU,	
		ZA,	ZW															
	RW:	GH,	GM,	KE,	LS,	MW,	MZ,	SD,	SL,	SZ	, TZ,	UG,	ZW,	ΑT,	BE,	CH,	CY,	
		DE,	DK,	ES,	FΙ,	FR,	GB,	GR,	ΙE,	17	, LU,	MC,	NL,	PT,	SE,	BF,	ВJ,	
		CF,	CG,	CI,	CM,	GA,	GN,	GW,	ML,	MF	, NE,	SN,	TD,	TG				
CA	2379	554			A1		2001	0125		CA	2000-	2379	554		2	0000	712	
AU	2000	0585	31		A		2001	0205		ΑU	2000-	5853	1		2	0000	712	
EP	1196	391			A1		2002	0417		EΡ	2000-	9444	21		2	0000	712	
	R:								GB,	GF	₹, IT,	LI,	LU,	NL,	SE,	MC,	PT,	
		IE,	SI,	LT,	LV,	FI,	RO											
TR	2002	0001	61		T2		2002	0521		TR	2002-	161			2	0000	712	
BR	2000	0130	41		A		2002	0716		BR	2000-	1304	1		2	0000	712	
HU	2002	0021	86		A2		2002	1228		HU	2002-	2186			2	0000	712	
HU	2002	0021	86		A3		2003	0228										
JP	2003	5053	76		T													
	2002										2002-							
	2002																	
	2002																	
	6582				В1		2003	0624								0020		
PRIORIT	Y APP	LN.	INFO	. :							1999-							
											1999-							
										WO	2000-	JP46	87		W 2	0000	712	

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT OTHER SOURCE(S):

MARPAT 134:100871
GI

AB Benzimidazolone derivs. I, its prodrugs or pharmaceutically acceptable salts thereof, a method for their preparation, pharmaceutical compns. containing

them, and usefulness in treatment or prevention of diseases mediated by cyclic quanosine-3',5'-monophosphate phosphodiesterase (cGMP-PDE) are claimed. In I, Xa = CH or N; ya = O, S; Rla = halogen, cyano, NO2 carbamoyl, lower alkylcarbamoyl which may be substituted with a heterocyclic group, carboxy, protected carboxy, lower alkyl, halo(lower)alkyl, lower alkoxy, acyl, lower alkanesulfonyl. R2a = lower alkyl, cycloalkyl or heterocyclic group, among which the lower alkyl group may have 1-3 substituents = OH, protected OH, acyl, lower-alkoxy-substituted aralkyloxy, amino, lower alkylamino, acylamino, lower alkoxycarbonylamino, lower alkanesulfonylamino, ureido, lower alkylureido, sulfamoylamino, protected carboxy, carboxy, lower alkanesulfonyl, lower alkylenedioxy, carbamoyl, lower alkyl carbamoyl and sulfamoyl; and the cycloalkyl group and the heterocyclic group may have 1-3 substituents = OH, protected OH, acyl, lower-alkoxy-substituted aralkyloxy, amino, acylamino, lower alkoxycarbonylamino, lower alkanesulfonylamino, ureido, lower alkylureido, sulfamoylamino, protected carboxy, lower alkanesulfonyl, lower alkyl, hydroxy(lower)alkyl, protected hydroxy(lower)alkyl, lower alkylenedioxy, carbamoyl and sulfamoyl. R3a, R4a and R5a = same or different, H, halogen, lower alkanoyl, carboxy, protected carboxy, carbamoyl, nitro, cyano, lower alkyl optionally substituted by hydroxy, lower alkoxy or lower-alkoxy-substituted aralkyl; or two of R3a, R4a and R5a may combine together to form a lower alkylenedioxy. M = 1, 2, provided that when R3a = H, R4a = lower alkoxy and R5a = H, halogen, cyano, lower alkyl, lower alkoxy, protected carboxy, carboxy or nitro, then (1) the lower alkyl for R2a has 1-3 substituents = OH, protected OH, acyl, lower-alkoxy-substituted aralkyloxy, amino, acylamino, lower alkoxycarbonylamino, lower alkanesulfonylamino, ureido, lower alkylureido, sulfamoylamino, protected carboxy, carboxy, lower

alkanesulfonyl, lower alkylenedioxy, carbamoyl, lower alkyl carbamoyl and sulfamoyl, (2) the cycloalkyl for R2a has 1-3 substituents = OH, protected OH, acyl, lower-alkoxy-substituted aralkyloxy, amino, acylamino, lower alkoxycarbonylamino, lower alkanesulfonylamino, ureido, lower alkylureido, sulfamoylamino, protected carboxy, lower alkanesulfonyl, lower alkyl, hydroxy(lower)alkyl, protected hydroxy(lower)alkyl, lower alkylenedioxy, carbamov1 and sulfamov1, (3) the heterocyclic group for R2a = pyrrolidinyl, dioxanyl and piperidyl which groups may be substituted with protected carboxy, acyl, lower alkanesulfonyl, carbamoyl or sulfamoyl, (4) Rla = carbamoyl, lower alkylcarbamoyl which may be substituted with a heterocyclic group, carboxy, protected carboxy, acyl, or lower alkanesulfonyl, (5) Xa = N; (6) m = 2; or (7) yra = S. Pharmaceutical compns. containing the above compds. are claimed (with test data provided for 8 compds.) to be effective for treatment or prevention of diseases mediated by cGMP-PDE: angina, hypertension, pulmonary hypertension, congestive heart failure, glomerular diseases, renal tubulo-intestinal diseases, renal failure, atherosclerosis, conditions of reduced blood vessel patency, peripheral vascular disease, stroke, bronchitis, asthma, allergic rhinitis, urticaria, glaucoma, diseases characterized by disorders of out motility, erectile dysfunction, female sexual dysfunction, impotence, diabetic complications, micturition disorder, or incontinence and storage of urine disorder. The method of preparation comprises reacting II with III (Z1 = halogen) in the presence of base. III are made by intramol. cyclization of IV (X = N). For example, to a solution of 1-(trans-4-hydroxycyclohexyl)-5-trifluoromethyl-2,3-dihydro-1Hbenzimidazol-2-one (200 mg) in anhydrous DMF (2 mL) was added portionwise NaH (29.3 mg, 60% dispersion in mineral oil) at 5° under N2 atmosphere, and the mixture was stirred at room temperature for 30 min. After adding 3,4-dimethoxybenzyl bromide (154 mg), the mixture was stirred at room temperature

for 2 h. After workup, 3-(3,4-dimethoxybenzyl)-1-(trans-4hydroxycyclohexyl)-5-trifluoromethyl-2,3-dihydro-1H-benzimidazol-2-one (217.9 mg) was obtained as a colorless solid.

IT 320406-03-9P, 4-[((S)-1-Ethyl-2-hydroxyethyl)amino]-3nitrobenzonitrile

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(intermediate; benzimidazolone derivs., method of preparation and use as phosphodiesterase inhibitors)

RN 320406-03-9 HCAPLUS CN Benzonitrile, 4-[[(1

Benzonitrile, 4-[[(1S)-1-(hydroxymethyl)propyl]amino]-3-nitro- (CA INDEX NAME)

Absolute stereochemistry.

OS.CITING REF COUNT: 11 THERE ARE 11 CAPLUS RECORDS THAT CITE THIS

RECORD (11 CITINGS)

THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS REFERENCE COUNT:

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 24 OF 94 HCAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2000:86260 HCAPLUS

DOCUMENT NUMBER: 132:293994

TITLE: Mass spectrometric fragmentation reactions. XXXIX. The investigation of N-dinitrophenyl derivatives of amino

acids by electron/chemical ionization using a particle

beam interface

AUTHOR(S): Kaussmann, M.; Budzikiewicz, H.

CORPORATE SOURCE: Institut fur Organische Chemie der Universitat zu Koln, Koln, D-50939, Germany

SOURCE:

Spectroscopy (Amsterdam) (1999), 14(2), 67-82 CODEN: SPIJDZ; ISSN: 0712-4813

PUBLISHER: IOS Press DOCUMENT TYPE: Journal

LANGUAGE: English The EI and CI mass spectra of 2.4-dinitrophenvl(DNP)-amino acids and oligopeptides give characteristic mass spectra when a particle beam interface is used for introduction. They differ from mass spectra obtained after direct insertion into the ion source. In the particle beam interface the major part of the mols. suffers degradation by contact with metal surfaces such as decarboxylation and reduction of the nitro groups. The

final products are benzimidazole derivs. carrying in the 2-position the residue of the resp. amino acid. These products show characteristic fragmentation reactions which allow to identify isomeric amino acids. For DNP-di- and oligopeptides an identification of the N-terminal amino acid

is always possible, that of the C-terminus with restrictions.

31356-29-3

RL: PRP (Properties)

(investigation of dinitrophenyl derivs. of amino acids by mass spectrometric fragmentation reactions on beam surface)

RN 31356-29-3 HCAPLUS

CN Butanoic acid, 2-[(2,4-dinitrophenyl)amino]- (CA INDEX NAME)

OS.CITING REF COUNT: THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD 1

(1 CITINGS) REFERENCE COUNT:

THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 25 OF 94 HCAPLUS COPYRIGHT 2010 ACS on STN

1999:691067 HCAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER: 131:310451

TITLE: Preparation of anthranilamides as of cGMP-phosphodiesterase inhibitors

INVENTOR(S): Oku, Teruo; Sawada, Kozo; Kuroda, Akio; Inoue,

Takayuki; Kayakiri, Natsuko; Sawada, Yuki; Mizutani,

Tsuyoshi

PATENT ASSIGNEE(S): Fujisawa Pharmaceutical Co., Ltd., Japan

SOURCE: PCT Int. Appl., 192 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION:

	TENT													DATE			
								WO 1999-JP2028					1	9990	415		
	W:	ΑE,	AL,	AM,	ΑT,	AU,	AZ,	BA,	BB,	BG,	BR,	BY,	CA,	CH,	CN,	CU,	CZ,
											GM,						
											LT,						
		MW,	MX,	NO,	NZ,	PL,	PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL,	ΤJ,	TM,
											ZW						
	RW:																
											NL,			BF,	ΒJ,	CF,	CG,
		CI,	CM,	GΑ,	GN,	GW,	ML,	MR,	ΝE,	SN,	TD,	TG					
CA	2328	413			A1		1999	1028		CA 1	999-	2328	413		1	9990	415
ΑU	9931	708			A		1999	1108		AU 1	999-	3170	8		1	9990	415
ΑU	7582 9909	98			B2		2003	0320									
BR	9909	781			A		2000	1219		BR 1	999-	9781			1	9990	415
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EΡ	1080	069			A1		2001	0307		EP 1	999-	9136	86		1	9990	415
EP	1080										_					_	
	R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	PT,	IE,
JP	2001	5088	11		T		2001	0703		JP 1	999-	5527	66		1	9990	415
HU	2001	001/	93		AZ		2001	1028		HU 2	001-	1/93			1	9990	415
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IN	2000	VINOO	73 331		A.		2005	0111		IN 2	000-	E 2 4 2	1		2	0000	020
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										AU 1	998- 998-	7791			n 1	9991	210
										WO 1	999-	TD20	28		W 1	aaan	115

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

MARPAT 131:310451

OTHER SOURCE(S):

GI

AB RANEZICONHERB [I; R3 = H, OH, alkoxy, aryl, etc.; R4 = alkoxy, heterocyclyl, (alkyl)amino, etc.; Z = alkylene; Z1 = e-withdrawing group-substituted (halo)-1,2-phenylene] were prepared Thus, 2-fluoro-5-nitrobenzoic acid was amidated by 1,3-benzodioxole-5-methylamine and the product aminated by 4-aminocyclohexanol to give, after oxidation, title compound II. Data for biol, activity of I were given.

IT 24756-88-7P RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (preparation of anthranilamides as of GCMP-phosphodiesterase inhibitors)

RN 247566-88-7 HCAPLUS

CN Benzamide, N-(1,3-benzodioxol-5-ylmethyl)-2-[[(1R)-1-(hydroxymethyl)propyl]amino]-5-nitro- (CA INDEX NAME)

### Absolute stereochemistry.

OS.CITING REF COUNT: 7 THERE ARE 7 CAPLUS RECORDS THAT CITE THIS RECORD
(13 CITINGS)

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 26 OF 94 HCAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 1999:458983 HCAPLUS

DOCUMENT NUMBER: 131:153216

TITLE: Stereochemical resolution of racemates, in HPLC, using a chiral stationary phase based upon immobilized  $\alpha$ -chymotrypsin. Part 1. Structural chiral separations

\*

#### STN Search

Felix, G.; Descorps, V. AUTHOR(S):

ENSCPB, Talence, F-33402, Fr. CORPORATE SOURCE:

SOURCE: Chromatographia (1999), 49(11/12), 595-605

CODEN: CHRGB7; ISSN: 0009-5893

PUBLISHER: Friedrich Vieweg & Sohn Verlagsgesellschaft mbH

DOCUMENT TYPE: Journal LANGUAGE: English

a-Chymotrypsin was immobilized on an epoxide derivatized silica gel by an in-situ immobilization process. Several protected amino acids and

other racemates were resolved by a structural recognition mechanism. The immobilization process and the stability of this a-chymotrypsin stationary phase were studied. Mobile phase parameters including the ionic strength, pH, and the effects of organic modifiers were also investigated. The retention, efficiency, and stereoselectivity of the solutes appear to be related to their mol. structure, hydrophobicity, and electrostatic interactions. These relationships determine the recognition mechanism and the position of each enantiomer in the active site.

4470-69-3P

RL: ANT (Analyte); PUR (Purification or recovery); ANST (Analytical study); PREP (Preparation)

(HPLC resolution with chiral stationary phase based upon silica-immobilized chymotrypsin)

4470-69-3 HCAPLUS

CN Butanoic acid, 2-[(2,4-dinitrophenyl)amino]-, (2S)- (CA INDEX NAME)

#### Absolute stereochemistry.

ACCESSION NUMBER:

OS.CITING REF COUNT: 33 THERE ARE 33 CAPLUS RECORDS THAT CITE THIS

RECORD (33 CITINGS)

REFERENCE COUNT: 47 THERE ARE 47 CITED REFERENCES AVAILABLE FOR THIS RECORD, ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 27 OF 94 HCAPLUS COPYRIGHT 2010 ACS on STN

1999:188279 HCAPLUS DOCUMENT NUMBER: 130:282358

TITLE: Solid-phase peptide synthesis by fragment condensation: coupling in swelling volume

Rinnova, Marketa; Lebl, Michal; Soucek, Milan AUTHOR(S): CORPORATE SOURCE: Institute of Organic Chemistry and Biochemistry,

Prague, CZ-166 10/6, Czech Rep.

SOURCE: Letters in Peptide Science (1999), 6(1), 15-22 CODEN: LPSCEM: ISSN: 0929-5666

Kluwer Academic Publishers PUBLISHER:

DOCUMENT TYPE: Journal

LANGUAGE: English

The condensation of short peptides to resin-bound fragments was examined

with respect to high coupling yields with only a small molar excess of a peptide in the reaction solution. The best results were achieved by the addition

of reactants (C-unprotected peptide, diisopropylcarbodiimide, and HOBt) dissolved in a so-called swelling volume of an appropriate solvent to a dry resin with an attached N-deprotected peptide chain. Each coupling step was followed by the end-capping of unreacted resin-bound peptide with 2.4-dinitrofluorobenzene. The substituted dinitroaniline chromophore formed in this reaction made the detection and separation of deletion peptides easy. Both conventional and "swelling volume" methods were compared on parallel syntheses of the HIV-1 protease C-terminal 78-99 fragment. The yields of the isolated heneicosapeptide were 21 and 81% in favor of the "swelling volume" procedure.

222978-91-8P

RL: BYP (Byproduct); PREP (Preparation) (solid-phase peptide synthesis by fragment condensation coupling in swelling volume)

222978-91-8 HCAPLUS RN

L-Phenylalanine, (2S)-2-[(2,4-dinitrophenyl)amino]butanovl-L-threonyl-Lleucvl-L-asparaginvl- (9CI) (CA INDEX NAME)

## Absolute stereochemistry.

OS.CITING REF COUNT: THERE ARE 7 CAPLUS RECORDS THAT CITE THIS RECORD

(7 CITINGS) REFERENCE COUNT: THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 28 OF 94 HCAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1999:77546 HCAPLUS

DOCUMENT NUMBER: 130:158261

TITLE: Novel oxidative hair dve compositions containing cationic oxidation bases

INVENTOR(S): Genet, Alain; Lagrange, Alain

PATENT ASSIGNEE(S): L'Oreal, Fr.

SOURCE: PCT Int. Appl., 72 pp. CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: French

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

W	О	9903	836			A1		1999	0128		WO 1	998-	FR15	35		1	9980	713
		W:	AL,	AM,	AT,	AU,	AZ,	BA,	BB,	BG,	BR,	BY,	CA,	CH,	CN,	CU,	CZ,	DE
			DK,	EE,	ES,	FI,	GB,	GE,	GH,	GM,	HR,	HU,	ID,	IL,	IS,	JP,	KE,	KG
			KP.	KR.	KZ,	LC.	LK.	LR.	LS.	LT.	LU,	LV.	MD,	MG.	MK,	MN.	MW.	MX
			NO,	NZ,	PL,	PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL,	TJ,	TM,	TR,	TT
			UA,	UG,	US,	UZ,	VN,	YU,	ZW									
		RW:	GH,	GM,	KE,	LS,	MW,	SD,	SZ,	UG,	ZW,	AT,	BE,	CH,	CY,	DE,	DK,	ES
												PT,						
			CM,					MR,										
F	R	2766	178			A1		1999	0122		FR 1	997-	9028			1	9970	716
		2766						2000										
C	A	2265	539			A1		1999	0128		CA 1	998-	2265	539		1	9980	713
C	A	2265	539			C		2005	0215									
A	U	9887	355			A		1999	0210		AU 1	998-	8735	5		1	9980	713
E	Ρ	9282	89			A1		1999	0714		EP 1	998-	9387	45		1	9980	713
E	Ρ	9282	89			B1		2004	0929									
		R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT
			ΙE,															
		2000						2000	0314		JP 1	999-	5065	76		1	9980	713
		3825						2006										
		2779						2004	1015			998-						
		2230						2005				998-						
U	S	6638	321			B1		2003	1028			999-						
PRIORI'	ΓY	APP:	LN.	INFO	. :							997-						
												998-					9980	713

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT OTHER SOURCE(S): MARPAT 130:158261

AB Novel monobenzene oxidation bases comprise at least a cationic group being selected among the aliphatic chains containing at least a quaternized unsatd. cycle. Their use for oxidation dyeing of keratin fibers, dyeing compns. containing them and oxidation dyeing methods using them is disclosed. Thus, 1-[2-(4-aminophenylamino)-ethyl]-3-methyl-3-l-imidazol-1-ium (1) was prepared by reduction of 3-methyl-1-[2-(4-nitrophenylamino)-ethyl]-3H-imidazol-1-ium and reaction with HCl. A hair dye preparation contained I 1.036, 2-methyl-5-N-(6-hydroxyethyl)aminophenol 0.543 and exciptent q.s. 100

g. IT 220159-25-1P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(novel oxidative hair dye compns. containing cationic oxidation bases) RN 220159-25-1 HCAPLUS

CN 1-Butanol, 2-[(4-nitrophenyl)amino]- (CA INDEX NAME)

OS.CITING REF COUNT: 24 THERE ARE 24 CAPLUS RECORDS THAT CITE THIS RECORD (25 CITINGS)

REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 29 OF 94 HCAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1998:491329 HCAPLUS

DOCUMENT NUMBER: 129:197343

ORIGINAL REFERENCE NO.: 129:39901a,39904a

TITLE: Highly enantioselective HPLC separations using the covalently bonded macrocyclic antibiotic, ristocetin

A, chiral stationary phase

AUTHOR(S): Ekborg-Ott, K.; Liu, Youbang; Armstrong, Daniel W. CORPORATE SOURCE: Department Chemistry, University Missouri-Rolla,

Rolla, MO, USA

SOURCE: Chirality (1998), 10(5), 434-483 CODEN: CHRLEP; ISSN: 0899-0042

PUBLISHER: Wiley-Liss, Inc.

DOCUMENT TYPE: Journal

LANGUAGE: English

The macrocyclic glycopeptide, ristocetin A, was covalently bonded to a silica gel support and evaluated as a liquid chromatog. (LC) chiral stationary phase (CSP). Over 230 racemates were resolved in either the reversed-phase mode, the normal-phase mode, or the polar-organic mode. The retention behavior and selectivity of this CSP were examined in each mode. Optimization of sepns. on this column is discussed. The ristocetin A CSP appeared to be complimentary to other glycopeptide CSPs (i.e., vancomycin and teicoplanin). Column stability was excellent. The CSP was not irreversibly altered when going from one mobile phase mode to another.

4470-69-3

RL: ANT (Analyte); PEP (Physical, engineering or chemical process); PRP (Properties); ANST (Analytical study); PROC (Process)

(enantiomeric separation by HPLC using covalently bonded macrocyclic antibiotic ristocetin A as chiral stationary phase)

4470-69-3 HCAPLUS RN

Butanoic acid, 2-[(2,4-dinitrophenyl)amino]-, (2S)- (CA INDEX NAME)

### Absolute stereochemistry.

THERE ARE 109 CAPLUS RECORDS THAT CITE THIS OS.CITING REF COUNT: 109

RECORD (110 CITINGS)

REFERENCE COUNT: THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS 32 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 30 OF 94 HCAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 1998:208450 HCAPLUS

DOCUMENT NUMBER: 128:267960

ORIGINAL REFERENCE NO.: 128:52979a,52982a

TITLE: Crosslinked protein crystals as universal separation media

INVENTOR(S): Margolin, Alexey L.; Vilenchik, Lev Z.

PATENT ASSIGNEE(S): Altus Biologics Inc., USA; Margolin, Alexey L.;

Vilenchik, Lev Z.

SOURCE: PCT Int. Appl., 115 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION:

PATENT NO.						KIND DATE				APPL	ICAT		DATE				
WO	WO 9813119				A1	-	19980402			WO 1	997-		19970924				
	W:	AL,	AM,	AT,	AU,	AZ,	BA,	BB,	BG,	BR,	BY,	CA,	CH,	CN,	CU,	CZ,	DE
		DK,	EE,	ES,	FI,	GB,	GE,	GH,	HU,	ID,	IL,	IS,	JP,	KE,	KG,	KP,	KR
		KZ,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	MD,	MG,	MK,	MN,	MW,	MX,	NO,	NZ
		PL,	PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL,	TJ,	TM,	TR,	TT,	UA,	UG
		US,	UZ,	VN,	YU,	ZW											
	RW:	GH,	KE,	LS,	MW,	SD,	SZ,	UG,	ZW,	AT,	BE,	CH,	DE,	DK,	ES,	FI,	FR
		GB,	GR,	IE,	IT,	LU,	MC,	NL,	PT,	SE,	BF,	BJ,	CF,	CG,	CI,	CM,	GA
		GN,	ML,	MR,	NE,	SN,	TD,	TG									
AU	9747	381			A		1998	0417		AU 1	997-	4738	1		1	9970	924
PRIORIT	Y APP	LN.	INFO	. :						US 1	996-	7191	14		A2 1	9960	924
										WO 1	997-	US17	167		W 1	9970	924
													1				- 1 -

AB The present invention relates to the use of crosslinked protein crystals in methods, apparatus and systems for separating a substance or mol. of interest

crom a sample. According to a preferred embodiment of this invention, crosslinked protein crystals are used in chromatog, methods, apparatus and systems in which separation is based on a phys. or chemical property of that substance or mol. of interest. Advantageously, the crosslinked protein crystals which characterize the methods, apparatus and systems of this invention possess excellent mech. strength and well developed porous structure, demonstrate significant affinity and chiral selectivity and are extremely stable in aqueous and organic solvents. These properties render the crystals particularly useful as sorbents for sepns., including size exclusion, affinity and chiral chromatog. Crosslinked bovine serum albumin crystals were prepared and packed in a chromatog. column. Ketoprofen, suprofen, and naproxen were separated by affinity chromatog. 31356-29-3P

IT 31356-29-3P RL: ANT (Analyte); PUR (Purification or recovery); ANST (Analytical study); PREP (Preparation)

(crosslinked protein crystals as universal separation media)

RN 31356-29-3 HCAPLUS

CN Butanoic acid, 2-[(2,4-dinitrophenyl)amino]- (CA INDEX NAME)

OS.CITING REF COUNT: 10 THERE ARE 10 CAPLUS RECORDS THAT CITE THIS

RECORD (10 CITINGS)

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 31 OF 94 HCAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 1998:106701 HCAPLUS

ACCESSION NUMBER: 1998:106701 DOCUMENT NUMBER: 128:135908

ORIGINAL REFERENCE NO.: 128:26545a,26548a

TITLE: Characterization and Evaluation of d-(+)-Tubocurarine

Chloride as a Chiral Selector for Capillary

Electrophoretic Enantioseparations

AUTHOR(S): Nair, Usha B.; Armstrong, Daniel W.; Hinze, Willie L.

CORPORATE SOURCE: Departments of Chemistry, University of Missouri-Rolla, Rolla, MO, 65401, USA

SOURCE: Analytical Chemistry (1998), 70(6), 1059-1065

CODEN: ANCHAM; ISSN: 0003-2700

PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal

LANGUAGE: English

AB A new macrocyclic of the bis(benzylisoquinoline) alkaloid family,

d-(+)-tubocurarine chloride (DTC), was evaluated as a chiral selector for the separation of optical isomers of organic carboxylates using capillary electrophoresis (CE). The pertinent physicochem. properties, such as absorption spectrum, isoionic point, and solution conformation, of DTC were determined The effects varying such exptl. parameters as DTC concentration,

methanol content in the running buffer were assessed. CE separation of the enantiomers of 18 different compds. was achieved using DTC as the chiral

selector under optimized background electrolytic conditions.

IT 4470-69-3, L-(2,4-Dinitrophenyl)-α-amino-n-butyric acid

RL: ANT (Analyte); ANST (Analytical study)

(organic carboxylate enantiomers resolution by capillary electrophoresis using tubocurarine chloride as chiral selector)

RN 4470-69-3 HCAPLUS

pH, and

CN Butanoic acid, 2-[(2,4-dinitrophenyl)amino]-, (2S)- (CA INDEX NAME)

Absolute stereochemistry.

OS.CITING REF COUNT: 12 THERE ARE 12 CAPLUS RECORDS THAT CITE THIS

RECORD (12 CITINGS)

REFERENCE COUNT: 49 THERE ARE 49 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 32 OF 94 HCAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1997:748872 HCAPLUS

DOCUMENT NUMBER: 128:97110

ORIGINAL REFERENCE NO.: 128:18833a,18836a

TITLE: Evaluation of two amine-functionalized cyclodextrins

as chiral selectors in capillary electrophoresis:

comparisons to vancomycin

AUTHOR(S): Nair, Usha B.; Armstrong, Daniel W.
CORPORATE SOURCE: Department of Chemistry, University of Missouri,

Rolla, MO, 65401, USA

SOURCE: Microchemical Journal (1997), 57(2), 199-217

CODEN: MICJAN; ISSN: 0026-265X

PUBLISHER: Academic Press
DOCUMENT TYPE: Journal

DOCUMENT TYPE: Journal LANGUAGE: English

Two different amine-functionalized  $\beta$ -cyclodextrins were evaluated as chiral selectors in capillary electrophoresis. The first was a monosubstituted  $\delta$ -ethylenediamine-derivatized  $\beta$ -cyclodextrin, and the other was quaternary ammonium hydroxypropyl- $\beta$ -cyclodextrin. The former compound was more widely useful as a chiral selector and had less effect on the electroosmotic flow than the latter compound Both tended to resolve anionic compds. The primary attractive interaction between these host chiral selectors and their enantiomeric guests were charge-charge (ionic) and hydrophobic inclusion. Addnl. interactions involved hydrogen bonding and/or steric repulsions. The cationic cyclodextrins were not as widely useful in resolving anionic compds. as was vancomycin. However, they tended to be more stable and were comparatively transparent to near-UV light.

31356-29-3, 2,4-Dinitrophenyl-DL-α-amino-n-butyric acid

RL: ANT (Analyte); ANST (Analytical study)

(chiral resolution of; chiral selection mechanisms and ability of amine-functionalized cyclodextrins in capillary electrophoresis)

RN 31356-29-3 HCAPLUS

CN Butanoic acid, 2-[(2,4-dinitrophenyl)amino]- (CA INDEX NAME)

OS.CITING REF COUNT: 24 THERE ARE 24 CAPLUS RECORDS THAT CITE THIS

RECORD (24 CITINGS)

REFERENCE COUNT: 41 THERE ARE 41 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 33 OF 94 HCAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1997:476570 HCAPLUS DOCUMENT NUMBER: 127:220944

ORIGINAL REFERENCE NO.: 127:43069a

TITLE: A nonempirical method using LC/MS for determination of the absolute configuration of constituent amino acids in a peptide: elucidation of limitations of Marfey's

method and of its separation mechanism
AUTHOR(S): Fujii, Kiyonaga; Ikai, Yoshitomo; Mayumi, Tsuyoshi;

AUTHOR(S): Fujii, Kiyonaga; Ikai, Yoshitomo; Mayumi, Tsuyoshi Oka, Hisao; Suzuki, Makoto; Harada, Ken-ichi CORPORATE SOURCE: Faculty of Pharmacy, Meijo University, Tempaku, 468,

Japan

SOURCE: Analytical Chemistry (1997), 69(16), 3346-3352

CODEN: ANCHAM; ISSN: 0003-2700
ISHER: American Chemical Society

PUBLISHER: American Chemica DOCUMENT TYPE: Journal

LANGUAGE: English

AB As the first step in establishing the author's proposed method, the advanced Marfey's method, which is planned for the simultaneous determination

of
the absolute configuration of amino acids in a peptide, Marfey's method was
applied to com. available amino acids, and the separation behavior was examined
in detail. Although good resolution of the diastereomeric pair of an
individual amino acid was obtained for all amino acids tested and the

applicability of the method was confirmed, the (1-fluoro-2,4-dinitrophenyl)-5-L-alaninamide (FDAA) derivative of the L-amino acid was not always eluted prior to its corresponding D-amino acid derivative Because this proposed method relies on the elution order of a derivatized amino acid with FDAA to determine its absolute configuration, its separation

mechanism

was carefully investigated using UV and NMR spectral techniques. The results suggested that the resulting conformations of the L- and D-amino acid derive. are stable and that the resolution between the L- and D-amino acid derive. Is due to the difference in their hydrophobicity, which is derived from the cis- or trans-type arrangement of two more hydrophobic substituents at both  $\alpha$ -carbons of an amino acid and L-alanine amide, so that the FDAA derivative of the cis (2)-type arrangement interacts more strongly with ODS silica gel and has a longer retention time than that of the trans (8)-type arrangement. Therefore, the L-amino acid derivative is usually eluted from the column before its corresponding D-amino acid derivative in Marfey's method. According to this separation mechanism, the

elution order of a desired amino acid can be elucidated from the average retention time of the L- and D-amino acid derivs., and the DL-serine and DL-asparagine derivs. are critical for Marfey's method.

IT 194736-16-8P

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (nonempirical method using LC/MS for determination of the absolute configuration of

constituent amino acids in peptides)

RN 194736-16-8 HCAPLUS

CN Butanoic acid, 2-[[5-[[(1S)-2-amino-1-methyl-2-oxoethyl]amino]-2,4-dinitrophenyl]amino]-, (2S)- (CA INDEX NAME)

Absolute stereochemistry.

OS.CITING REF COUNT: 92 THERE ARE 92 CAPLUS RECORDS THAT CITE THIS RECORD (92 CITINGS)

REFERENCE COUNT: 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 34 OF 94 HCAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 1997:126060 HCAPLUS

ACCESSION NUMBER: 1997:12606 DOCUMENT NUMBER: 126:238564

ORIGINAL REFERENCE NO.: 126:46169a, 46172a

TITLE: Preparation of a β-cyclodextrin-modified

N-carboxymethylchitosan and its chromatographic behavior as a chiral HPLC stationary phase

AUTHOR(S): Kurauchi, Yoshiaki; Ono, Hiroyoshi; Wang, Bo; Egashira, Naoyoshi; Ohga, Kazuya

CORPORATE SOURCE: Department of Applied Chemistry, Faculty of

Engineering, Oita University, Oita, 870-11, Japan SOURCE: Analytical Sciences (1997), 13(1), 47-52

CODEN: ANSCEN; ISSN: 0910-6340

PUBLISHER: Japan Society for Analytical Chemistry
DOCUMENT TYPE: Journal

LANGUAGE: English

Chitosan, whose deacetylation degree was 0.95, was N-carboxymethylated and subsequently modified with 6-amino-6-deoxy-β-cyclodextrin. The 1H NMR spectra of the carboxymethylated chitosan (NCMC) and the B-cvclodextrin-modified NCMC (B-CD-NCMC) showed introductions of ca. 8.4 of the carboxymethyl groups and 8.2 of  $\beta$ -CD moieties per 10 units, resp. β-CD-NCMC was covalently attached to a macroporous silica gel and used as a stationary phase for chiral HPLC sepns. of 2,4-dinitrophenyl- $\alpha$ -amino acids and related racemates. The chiral discrimination was influenced more strongly by the size of an alkyl group on the chiral center of the aliphatic amino acids, compared to a Cyclobond I bearing monomeric  $\beta$ -CD mols. The distance between two aromatic moleties on the aromatic amino acids and related racemates was also discriminated. The strict recognition required the high substitution degree of the β-CD moiety, permitting us to propose a simultaneous inclusion of the 2,4-dinitrophenyl group and another aromatic substituent or an alkyl group with a proper size into the two adjacent CD cavities on the polymer chain. 4470-69-3P

RL: PUR (Purification or recovery); PREP (Preparation)

(preparation of a  $\beta$ -cyclodextrin-modified N-carboxymethylchitosan and its chromatog. behavior as a chiral HPLC stationary phase)

RN 4470-69-3 HCAPLUS

CN Butanoic acid, 2-[(2,4-dinitropheny1)amino]-, (2S)- (CA INDEX NAME)

Absolute stereochemistry.

OS.CITING REF COUNT: 7 THERE ARE 7 CAPLUS RECORDS THAT CITE THIS RECORD (7 CITINGS)

L11 ANSWER 35 OF 94 HCAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1996:426976 HCAPLUS DOCUMENT NUMBER: 125:195846

ORIGINAL REFERENCE NO.: 125:36687a,36690a

TITLE: Synthesis, some reactions and anti-ulcer activity of some 2-amino-3-(substituted phenyl)selenazolidines
AUTHOR(S): Hornyak, Gyula; Feller, Antal; Lempert, Karoly
CORPORATE SOURCE: Res. Group Alkaloid Chem., Hungarian Academy Sci.,

Budapest, H-1521, Hung.

SOURCE: ACH - Models in Chemistry (1995), 132(6), 871-885 CODEN: ACMCEI: ISSN: 1217-8969

PUBLISHER: Akademiai Kiado
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 125:195846

AB 2-Imino-3-(substituted phenyl)selenazolidine salts, e.g., I (R1 = H, NO2, CF3, X = Cl, Br), were prepared (1) by acid induced ring closure of N-(2-selenocyanatoethyl)anilines, or (2) by fusion of anilines with 2-bromoethylselenocyanate. E.g., 2-NO2C6H4NHCH2CH2SeCN is refluxed in dioxane the presence of ethanesulfonic acid to give I (R1 = H, HX = H03SEt) in 93% yield. Diselenide, e.g., (ArNHCH2CH2Se)2, formation accompanying the syntheses according to Method I above was successfully suppressed. Some N-substituted derivs. (e.g., II, R1 ≠ R2 = Cl,

GI

NO2, Z = CHO, Ac, CONHPr, SO2Et) of selenazolidines I, as well as 3-aryl-selenazolidin-2-one III (X = Se), and its thiazolidinone analog III (X = S), were also prepared The gastroprotective (antiulcer) activity of some of I, II and III is reported. 180691-77-4P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and methylsulfonvlation in the synthesis of amino(substituted phenyl)selenazolidines as antiulcer agents)

RN 180691-77-4 HCAPLUS

CN 1-Butanol, 2-[(2-chloro-4-nitrophenyl)amino]- (CA INDEX NAME)

OS.CITING REF COUNT:

THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L11 ANSWER 36 OF 94 HCAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 1996:357976 HCAPLUS

DOCUMENT NUMBER: 125:131259

ORIGINAL REFERENCE NO.: 125:24261a

TITLE: Chiral separation of  $\alpha$ -amino acid derivatives by

capillary electrophoresis using

6-amino-6-deoxy-β-cyclodextrin and its N-hexyl derivative as chiral selectors

AUTHOR(S): Egashira, Naoyoshi; Mutoh, Osamu; Kurauchi, Yoshiaki;

Ohga, Kazuya

CORPORATE SOURCE: Department Applied Chemistry, Oita University, Oita,

870-11, Japan SOURCE: Analytical Sciences (1996), 12(3), 503-505

CODEN: ANSCEN; ISSN: 0910-6340

PUBLISHER: Japan Society for Analytical Chemistry

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The chiral sepns. of N-(2,4-dinitrophenyl)- and N-dansyl- $\alpha$ -amino

acids by capillary zone electrophoresis (CZE) using

6-amino-6-deoxy-β-cyclodextrin (ACD) and

6-deoxy-6-hexylamino-β-cyclodextrin (HACD) as chiral selectors. Tetraalkylammonium additives with short alkyl chains adsorbed on a

capillary silica wall have improved in CZE through controlling an

electroosmotic flow. ACD having an amino group is also expected to adsorb on the capillary silica wall, and, thus, to produce more effective chiral

separation Further, chiral sepns, with HACD have been compared to those with ACD on the basis of the hydrophobicity of the hexyl group on HACD. 4470-69-3

RL: ANT (Analyte); ANST (Analytical study)

(chiral separation of α-amino acid derivs. by capillary electrophoresis using 6-amino-6-deoxy-β-cyclodextrin and its

N-hexyl derivative as chiral selectors)

RN 4470-69-3 HCAPLUS

Butanoic acid, 2-[(2,4-dinitrophenyl)aminol-, (2S)- (CA INDEX NAME)

Absolute stereochemistry.

OS.CITING REF COUNT:

RECORD (15 CITINGS)

L11 ANSWER 37 OF 94 HCAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 1996:356933 HCAPLUS

15

DOCUMENT NUMBER: 125:167832

ORIGINAL REFERENCE NO.: 125:31449a,31452a

TITLE:

Synthesis of new pyrrolo- and thieno[2,3-b]pyridine derivatives by the Thorpe-Ziegler reaction

THERE ARE 15 CAPLUS RECORDS THAT CITE THIS

AUTHOR(S): Yakovlev, M. Yu.; Kadushkin, A. V.; Granik, V. G. CORPORATE SOURCE: TsKhLS-VNIKhFI, Moscow, Russia

SOURCE: Khimiko-Farmatsevticheskii Zhurnal (1996), 30(2),

36-38

CODEN: KHFZAN; ISSN: 0023-1134

PUBLISHER: Izdatel'stvo Folium

DOCUMENT TYPE: Journal

LANGUAGE: Russian

OTHER SOURCE(S): CASREACT 125:167832

Various 2-aminopyridines were prepared in good yields by reacting 2-chloro-3-cyano-5-nitropyridine with amines and amino alcs. The product of the reaction with glycine Me ester,

2-[[(methoxycarbonyl)methyl]amino]-3-cyano-5-nitropyridine, failed to enter the Thorpe-Ziegler cyclization, presumably due to the presence of the secondary amino group. The reaction with N-methylaminoacetate and thioglycolate gave suitable intermediates, which in the presence of Na ethoxide underwent intermol. Thorpe-Ziegler cyclization to afford pyrroloand thieno[2,3-b]pyridines.

180424-16-2P

RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of pyrrolo- and thieno[2,3-b]pyridines by Thorpe-Ziegler cvclization)

180424-16-2 HCAPLUS RN

3-Pyridinecarbonitrile, 2-[[1-(hydroxymethyl)propyl]amino]-5-nitro- (CA

INDEX NAME)

HO-CH2
Et-CH-NH
NC

OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (4 CITINGS)

L11 ANSWER 38 OF 94 HCAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 1996:148859 HCAPLUS

DOCUMENT NUMBER: 1996:14885

ORIGINAL REFERENCE NO.: 124:44713a,44716a

TITLE: Capillary electrophoretic enantiomeric separations using the glycopeptide antibiotic, teicoplanin
AUTHOR(S): Rundlett, Kimber L.; Gasper, Mary P.; Zhou, Eve Y.;

Armstrong, Daniel W.

CORPORATE SOURCE: University Missouri, Rolla, MO, USA SOURCE: Chirality (1996), 8(1), 88-107

PUBLISHER: Wiley-Liss
DOCUMENT TYPE: Journal
LANGUAGE: English

Teicoplanin is the third in a series of macrocyclic glycopeptide antibiotics that has been evaluated as a chiral selector in capillary electrophoresis (CE). It was used to resolve over 100 anionic racemates at low selector concns. Like the other related glycopeptide antibiotics, its enantioselectivity tends to be opposite to that of the ansa-type antibiotics which prefers cationic compds., particularly amines. Factors that affect teicoplanin-based enantiosepns. include the selector as well as the enantiosepn. Teicoplanin exhibited some features that were not noted with the other glycopeptide antibiotics. it forms micelles in aqueous solns, and this influence its enantioselectivity. Unlike the other studied glycopeptides, teicoplanin ppts. in alc.-water mixts. It also binds less to the capillary wall than vancomycin as evidenced by the faster electroosmotic flow velocity. The micellization of teicoplanin is pH dependent so that the effect of pH on enantiorecognition is more complex for teicoplanin than for other chiral selectors. Also it is shown that the simple model proposed to explain the role of organic modifiers in cyclodextrin-based CE enantiosephs, may not apply to these and other systems.

CODEN: CHRLEP; ISSN: 0899-0042

IT 31356-29-3

RL: ANT (Analyte); ANST (Analytical study)

(enantiomeric separation of drugs by capillary electrophoresis using teicoplanin as a chiral selector)

RN 31356-29-3 HCAPLUS

CN Butanoic acid, 2-[(2,4-dinitrophenyl)amino]- (CA INDEX NAME)

OS.CITING REF COUNT: THERE ARE 77 CAPLUS RECORDS THAT CITE THIS RECORD (77 CITINGS)

L11 ANSWER 39 OF 94 HCAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1995:320833 HCAPLUS DOCUMENT NUMBER: 122:142711

ORIGINAL REFERENCE NO.: 122:26343a,26346a

TITLE:

Highly enantioselective capillary electrophoretic separations with dilute solutions of the macrocyclic

antibiotic ristocetin A Armstrong, Daniel W.; Gasper, Mary P.; Rundlett, AUTHOR(S):

Kimber L.

Department of Chemistry, University of Missouri-Rolla, CORPORATE SOURCE: Rolla, MO, 65401, USA

SOURCE: Journal of Chromatography, A (1995), 689(2), 285-304

CODEN: JCRAEY; ISSN: 0021-9673

Elsevier PUBLISHER: DOCUMENT TYPE: Journal

LANGUAGE: English

Ristocetin A is one of a series of structurally related amphoteric, glycopeptide, macrocyclic antibiotics. These compds. have several features that make them attractive as chiral selectors. These include spatially oriented functional groups that are known to provide the types of interactions that are conducive to enantio-recognition, a somewhat rigid "pocket" that can provide a site for hydrophobic interactions and polar, flexible arms (i.e., pendent sugar moieties) that can rotate to hydrogen bond and otherwise interact with a variety of chiral analytes. In addition, these compds. are sufficiently soluble in water, aqueous buffers

and

aqueous-organic solvents that are commonly used in capillary electrophoresis (CE). The use and optimization of ristocetin A as a chiral selector in CE is discussed. Over 120 racemates are resolved including a variety of N-blocked amino acids, non-steroidal anti-inflammatory compds. and a large number of biol. important compds. containing carboxylic acid groups (e.g., mandelic acid derivs., lactic acid derivs., folinic acid, tropic acid).

31356-29-3P TΤ

RL: PUR (Purification or recovery); PREP (Preparation) (highly enantioselective capillary electrophoretic sepns. with dilute solns. of the macrocyclic antibiotic ristocetin A)

RN 31356-29-3 HCAPLUS

CN Butanoic acid, 2-[(2,4-dinitrophenyl)amino]- (CA INDEX NAME)

OS.CITING REF COUNT: 106 THERE ARE 106 CAPLUS RECORDS THAT CITE THIS RECORD (107 CITINGS)

L11 ANSWER 40 OF 94 HCAPLUS COPYRIGHT 2010 ACS on STN 1995:111539 HCAPLUS

ACCESSION NUMBER: DOCUMENT NUMBER:

123:24944

ORIGINAL REFERENCE NO.: 123:4403a,4406a

TITLE:

Evaluation of the macrocyclic antibiotic vancomycin as a chiral selector for capillary electrophoresis

AUTHOR(S): Armstrong, Daniel W.; Rundlett, Kimber L.; Chen, Jing-Ran

CORPORATE SOURCE: Dep. Chem., Univ. Missouri-Rolla, Rolla, MO, USA Journal

SOURCE: Chirality (1994), 6(6), 496-509 CODEN: CHRLEP: ISSN: 0899-0042

DOCUMENT TYPE:

LANGUAGE:

English Vancomycin is one of a family of related macrocyclic glycopeptide antibiotics that were discovered by the scientists at the Eli Lilly Company in the 1950s. It has been used to treat severe staphylococcal infections, particularly when bacterial resistance to other antibiotics has developed. Vancomycin is a naturally occurring chiral compound and has a number of stereogenic centers. Furthermore, it contains a variety of functionalities that are known to be useful for enantioselective interactions (e.g., hydrogen bonding groups, hydrophobic pockets, aromatic groups, amide linkages, etc.). The physicochem. properties of vancomycin, including its stability in solution, are discussed as they pertain to capillary electrophoresis. Over 100 racemates were resolved including many nonsteroidal antiinflammatory drugs, antineoplastic compds. and N-derivatized amino acids. Many of these compds. had very high resolution factors. Optimization and the effect of different exptl. parameters on

ΙT 4470-69-3

the enantioselective sepns, are discussed. RL: ANT (Analyte); ANST (Analytical study)

(evaluation of macrocyclic antibiotic vancomycin as chiral selector for capillary electrophoresis)

RN 4470-69-3 HCAPLUS

CN Butanoic acid, 2-[(2,4-dinitrophenyl)amino]-, (2S)- (CA INDEX NAME)

Absolute stereochemistry.

OS.CITING REF COUNT: 193 THERE ARE 193 CAPLUS RECORDS THAT CITE THIS RECORD (195 CITINGS)

L11 ANSWER 41 OF 94 HCAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 1994:545848 HCAPLUS

ACCESSION NUMBER: DOCUMENT NUMBER:

121:145848

ORIGINAL REFERENCE NO.: 121:26141a,26144a

TITLE: heterocyclic compound crystals and manufacture thereof INVENTOR(S): Komatsu, Hiromi; Shigemoto, Takeo; Sugyama, Tsunetoshi

PATENT ASSIGNEE(S): Japan Synthetic Rubber Co Ltd, Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 31 pp.

CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 06056771	A	19940301	JP 1992-233134	19920807
PRIORITY APPLN. INFO.:			JP 1992-233134	19920807
OTHER SOURCE(S):	MARPAT	121:145848		

- AB The crystal is represented by I (X, Y, Z=C, O, S, or N with optional substituting H, or monovalent or divalent radical except for O atom(s); Ar=aromatic radical with optional substituting radical(s)) and has ≥1 pairs of optically even faces parallel to each other. A solvent(s) which have solubility of 1-50 g at 25° may be used for growth, and may be a mixture of ≥2 solvents such that crystal habit of the crystal grown from a single solvent differs from that from the other solvent.
- II 149873-63-2P RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (preparation and reaction of, oxazolidinone derivative compds. from)
- RN 149873-63-2 HCAPLUS
  CN 1-Butanol, 2-[(5-nitro-2-pyridinyl)aminol- (CA INDEX NAME)

L11 ANSWER 42 OF 94 HCAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1994:134962 HCAPLUS

DOCUMENT NUMBER: 120:134962

ORIGINAL REFERENCE NO.: 120:23799a,23802a

TITLE: Glycophanes, cyclodextrin-cyclophane hybrid receptors

for apolar binding in aqueous solutions. A

stereoselective carbohydrate-carbohydrate interaction in water

AUTHOR(S): Coteron, Jose M.; Vicent, Cristina; Bosso, Claude;

Penades, Soledad

Inst. Quim. Org., CSIC, Madrid, 28006, Spain

CORPORATE SOURCE:

SOURCE: Journal of the American Chemical Society (1993),

115(22), 10066-76

CODEN: JACSAT; ISSN: 0002-7863

DOCUMENT TYPE: Journal English

LANGUAGE:

The synthesis and complexing properties of a new type of neutral chiral receptors, cyclodextrin-cyclophanes, e.g. I, are reported. They are built from  $\alpha, \alpha'$ -trehalose and 2,7-dihydroxynaphthalene or 4,4'-isopropylidenediphenol. The water soluble glycophane I displays a general affinity for electron-deficient aromatic quests (nitro derivs. of phenol and benzenesulfonic and benzenecarboxylic acids), the association consts. increasing with the increased number of electron-withdrawing groups (NO2). Depending on the solvent, different factors seem to contribute to the stability of the complexes. In CD30D:D20 (1:1), electron donor-acceptor interactions are the main driving forces, whereas in water, addnl. hydrophobic effects increase the stability of the complexes. Glycophane I shows chiral discrimination toward racemic mixts. of 2,4-dinitrophenyl amino acid derivs. in solid-liquid extraction expts., with enantioselectivities ranging from 2,4-dinitrophenyl amino acid derivs. in solid-liquid extraction expts., with enantioselectivities ranging from 5 ro 40% as deduced by integration of the aromatic proton NMR signals of both enantiomers. Cyclodextrins (CDs) under the same conditions did not show any discrimination toward these derivs. A stereospecific

CN

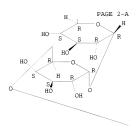
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carbohydrate-carbohydrate interaction in water has been shown between
glycophane I and the 4-nitrophenyl \alpha- and \beta-D-gluco-, \alpha-
and \beta-D-galacto- and \alpha- and \beta-D-mannopyranosyl derivs.,
and the contribution of this interaction to complex stability has been
evaluated. The complexes of CDs and 4-nitrophenyl glycosides did not show
any addnl. stabilization due to carbohydrate moieties.
152866-65-4P
RL: SPN (Synthetic preparation); PREP (Preparation)
   (preparation of)
152866-65-4 HCAPLUS
α-D-Glucopyranoside, 6,6'':6',6'''-bis-0-2,7-
naphthalenediylbis[\alpha-D-glucopyranosyl, compd. with
(R)-2-[(2,4-dinitrophenyl)amino]butanoic acid (1:1) (9CI) (CA INDEX NAME)
CM
CRN 142409-32-3
CMF C44 H52 O22
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Absolute stereochemistry.

PAGE 1-A







PAGE 2-B

CM

CRN 6367-34-6 CMF C10 H11 N3 O6

Absolute stereochemistry.

OS.CITING REF COUNT: 59 THERE ARE 59 CAPLUS RECORDS THAT CITE THIS RECORD (59 CITINGS)

L11 ANSWER 43 OF 94 HCAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 1993:594750 HCAPLUS

DOCUMENT NUMBER: 119:194750 ORIGINAL REFERENCE NO.:

119:34473a,34476a

TITLE: Thin-layer chromatographic enantioseparation of miscellaneous compounds with bovine serum albumin in the eluent

AUTHOR(S): Lepri, Luciano; Coas, Vanda; Desideri, Pier Giorgio; Pettini, Lilia

CORPORATE SOURCE: Dep. Public Health, Epidemiol., Univ. Florence, Florence, 50121, Italy

Journal of Planar Chromatography--Modern TLC (1993), SOURCE :

6(2), 100-4

CODEN: JPCTE5: ISSN: 0933-4173

DOCUMENT TYPE: Journal

LANGUAGE: English

The enantiomers of several optically active organic compds. have been separated using optimized chromatog, systems comprising RP-18W/UV254 or Sil C18-50 UV254 layers and eluents of different pH and ionic strength containing different amts. of bovine serum albumin (BSA) and organic modifier. BSA shows high enantioselectivity towards different N derivs. of DL amino acids, fluoro substituted tryptophans, and finally, unusual enantiomers such as 1,1'-bi-2-naphthol, binaphthyl-2,2'-diyl hydrogen phosphate, β-hydrastine, p-nitrophenyl-β-thiofucopyranoside, and 3,5-dinitro-N-(1-phenylethyl)benzamide, never before separated with this chiral agent. A total of more than 75 racemates has been separated in the authors' expts. with planar chromatog. using BSA in the mobile phase [reported in this and previous work] and the data obtained furnish some

interesting suggestions which might serve as a guideline for chiral sepns. 4470-69-3

RL: ANT (Analyte); ANST (Analytical study) (thin-layer chromatog, of, with bovine serum albumin-containing eluent)

Butanoic acid, 2-[(2,4-dinitrophenyl)amino]-, (2S)- (CA INDEX NAME)

Absolute stereochemistry.

4470-69-3 HCAPLUS

OS.CITING REF COUNT: 13 THERE ARE 13 CAPLUS RECORDS THAT CITE THIS RECORD (13 CITINGS)

L11 ANSWER 44 OF 94 HCAPLUS COPYRIGHT 2010 ACS on STN

1993:570229 HCAPLUS ACCESSION NUMBER: DOCUMENT NUMBER: 119:170229 ORIGINAL REFERENCE NO.: 119:30265a,30268a

TITLE: Nonlinear optical device

Shigemoto, Takeo; Sugvama, Tsunetoshi; Ukaji, Takashi INVENTOR(S):

PATENT ASSIGNEE(S): Japan Synthetic Rubber Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 32 pp. CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION:

> PATENT NO. KIND DATE APPLICATION NO. DATE

JP 05045688 19930226 JP 1991-289294 19911008 A PRIORITY APPLN. INFO.: JP 1990-295110 A1 19901031

OTHER SOURCE(S): MARPAT 119:170229

The title device consists of a compound XCH2C(R)HNHA [R (un)substituted alkyl, alkenyl, alkynyl, aryl, aralkyl, acyl, CO2H, carbamoyl, YS1CH2; Y = benzyl, C14 alkyl; X = OH, alkoxy, aralkyloxy; A = (un)substituted (hetero)aromatic] or a polymer containing the compound chemical bonded to the polymer.

149873-63-2P

RL: PREP (Preparation)

(preparation of, as nonlinear optical material)

RN 149873-63-2 HCAPLUS CN 1-Butanol, 2-[(5-nitro-2-pyridinyl)amino]- (CA INDEX NAME)

CH2-OH

L11 ANSWER 45 OF 94 HCAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1993:246573 HCAPLUS

DOCUMENT NUMBER: 118:246573

ORIGINAL REFERENCE NO.: 118:42521a,42524a

TITLE: Direct separation of enantiomers using

multiple-interaction chiral stationary phases based on

the modified  $\beta$ -cyclodextrin-bonded stationary

phase

AUTHOR(S): Li, Song; Purdy, William C.

CORPORATE SOURCE: Dep. Chem., McGill Univ., Montreal, QC, H3A 2K6, Can. SOURCE: Journal of Chromatography (1992), 625(2), 109-20

CODEN: JOCRAM; ISSN: 0021-9673

DOCUMENT TYPE: Journal

LANGUAGE: English

Several multiple-interaction chiral stationary phases have been developed. These stationary phases contain a hydrophobic cavity capable of inclusion complexation, aromatic groups capable of  $\pi$ - $\pi$  interaction, polar hydroxyl groups capable of hydrogen-bonding with the polar functional groups of the solute, and bulky non-polar groups providing steric repulsion. The characteristics and properties of these stationary phases are described. The direct separation of enantiomers of a wide variety of chiral compds. are reported. The effect of mobile phase composition on the

31356-29-3

retention and resolution is discussed. RL: ANST (Analytical study); PROC (Process)

(resolution of, by HPLC on modified β-cyclodextrin-bonded stationary phase)

31356-29-3 HCAPLUS RN

CN Butanoic acid, 2-[(2,4-dinitrophenyl)aminol- (CA INDEX NAME)

OS.CITING REF COUNT: 12 THERE ARE 12 CAPLUS RECORDS THAT CITE THIS RECORD (12 CITINGS)

L11 ANSWER 46 OF 94 HCAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 1988:187273 HCAPLUS

ACCESSION NUMBER: DOCUMENT NUMBER:

108:187273

ORIGINAL REFERENCE NO.: 108:30791a,30794a

TITLE: Optical resolution of amino acids

INVENTOR(S): Yuasa, Seiji

PATENT ASSIGNEE(S): Daicel Chemical Industries, Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 5 pp.
CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 62070348	A	19870331	JP 1985-210313	19850925
JP 06013463	В	19940223		

PRIORITY APPLN. INFO.:

JP 1985-210313 19850925

AB Mixts. of D- and L-amino acids are resolved by transforming to N-(substituted aryl) derivs. and separating by liquid chromatograph. Thus, an aqueous solution of racemic isoleucine and NaHCO3 was treated with 2,4-(OZN)2C6H3F in EtOH at 80° to give the N-aryl derivs., which

were separated on a cellulose column using BuOH/EtOH/H2O (4/1/0.1 vol) as

eluent. The separation factor was 2.23. IT 31356-29-3P

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation and optical resolution of, by liquid chromatog.)

RN 31356-29-3 HCAPLUS

CN Butanoic acid, 2-[(2,4-dinitrophenyl)amino]- (CA INDEX NAME)

OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L11 ANSWER 47 OF 94 HCAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 1985:407732 HCAPLUS

#### STN Search

DOCUMENT NUMBER:

103:7732

ORIGINAL REFERENCE NO.: 103:1373a,1376a

TITLE:

Isothiazole azo dves

INVENTOR(S): PATENT ASSIGNEE(S):

Loeffler, Hermann; Schefczik, Ernst BASF A.-G. , Fed. Rep. Ger.

Ger. Offen., 25 pp.

CODEN: GWXXBX

DOCUMENT TYPE:

Patent

LANGUAGE:

German

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 3330155	A1	19850307	DE 1983-3330155	19830820
EP 135131	A1	19850327	EP 1984-109602	19840813
EP 135131	B1	19861105		
R: CH, DE, FR,	GB, IT	, LI		
JP 60065066	A	19850413	JP 1984-171675	19840820
US 4774324	A	19880927	US 1986-838195	19860307
PRIORITY APPLN. INFO.:			DE 1983-3330155 A	19830820
			US 1984-641580 A2	19840817

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT OTHER SOURCE(S): MARPAT 103:7732

- Title dyes of general structure I are prepared, where R = H, C1-3 alkyl; R1 and R3 = H or (un)substituted alkyl, alkenyl, cycloalkyl, aralkyl, or arvl; R2 = H or (un)substituted alkvl; NR1R2 can be a saturated 5- or 6-membered ring; R4 = (un)substituted alkyl, cycloalkyl, aralkyl, or aryl; R5 = C1, Br, CONH2, or CN; and R6 = H, CONH2, or CN. I gave fast orange to bluish red dyeing or prints on polyester or cotton-polyester textiles. Typical dyes (all prepared by conventional diazotization and coupling of 5-aminoisothiazoles) are I (R = Me, R1 = H, R2 = C6H4OMe-o, R3 = cyclohexyl, R4 = Ph, R5 = R6 = CN) [96856-13-2], bluish red on cotton-polyester, and I (R = Me, R1 = R3 = H, R2 = CH2CH2CH2CH2CH2CH2CPh, R4 = Me, R5 = R6 = CN) [96856-14-3], orange on polyester. Numerous other I are reported. 96856-12-1
  - RL: RCT (Reactant); RACT (Reactant or reagent) (reaction of, with benzovl chloride)
- 96856-12-1 HCAPLUS
- 3-Pyridinecarbonitrile, 5-[2-(4-cvano-3-phenyl-5-isothiazolyl)diazenyl]-6-CN [[1-(hydroxymethyl)propyl]amino]-2-[(2-methoxyphenyl)amino]-4-methyl- (CA INDEX NAME)

STN Search

OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)

L11 ANSWER 48 OF 94 HCAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 1984:630056 HCAPLUS

ACCESSION NUMBER: DOCUMENT NUMBER:

101:230056

ORIGINAL REFERENCE NO.: TITLE:

101:34925a,34928a Studies on SNAr reactions of

4-(halogenmethylsulfonyl)-2-nitrohalobenzene with

amine derivatives

AUTHOR(S): Ejmocki, Zdzislaw; Eckstein, Zygmunt; Krasinski, Pawel; Zagorska, Krystyna

CORPORATE SOURCE: Inst. Org. Chem. Technol., Polytech. Univ., Warsaw, 00662, Pol.

SOURCE: Polish Journal of Chemistry (1983), 57(4-5-6), 555-60 CODEN: PJCHDQ; ISSN: 0137-5083

DOCUMENT TYPE: Journal LANGUAGE: English

OTHER SOURCE(S): English
CASREACT 101:230056

GI

AB Thirty-seven amino(halomethylsulfonyl)nitrobenzenes I (RR1N = NH2, Et2N,

morpholino, CH(CHMe2)CO2Et, NHCH2CO2Et, PhNH, NHCHPhCO2Et, cyclohexylamino, etc.; X = Cl, Br; n = 1,2) were prepared by bimol. aromatic substitution (SNAr) reaction of the title compds. II (X1 = Cl. Br) with RR1NH.

61497-19-6P

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of)

RN 61497-19-6 HCAPLUS

CN Butanoic acid, 2-[[4-[(dichloromethyl)sulfonyl]-2-nitrophenyl]amino]- (CA INDEX NAME)

OS.CITING REF COUNT: THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD 3 (3 CITINGS)

L11 ANSWER 49 OF 94 HCAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1983:64877 HCAPLUS DOCUMENT NUMBER: 98:64877

ORIGINAL REFERENCE NO.:

98:9769a,9772a

TITLE: Trinitrobenzenesulfonic acid: a chromophore,

electrophore and precolumn derivatizing agent for high performance liquid chromatography of alkylamines

AUTHOR(S): Caudill, W. Lowry; Wightman, R. Mark

CORPORATE SOURCE: Dep. Chem., Indiana Univ., Bloomington, IN, 47405, USA

SOURCE: Analytica Chimica Acta (1982), 141, 269-78

CODEN: ACACAM; ISSN: 0003-2670

DOCUMENT TYPE: Journal

LANGUAGE: English

Trinitrobenzenesulfonic acid (TNBS) is an ideal precolumn derivatizing agent for high-performance liquid chromatog, of alkyl amines. The reaction is quant, and the trinitrophenyl derivs, are amenable to UV and electrochem. detection. Electrochem. detection with either a glassy C or pressure-annealed pyrolytic graphite working electrode provides lower detection limits than UV detection and thus is preferable for trace detns. The applicability of TNBS for the separation and detection of amino acids is described.

84328-76-7P

RL: ANST (Analytical study); PREP (Preparation)

(preparation of)

84328-76-7 HCAPLUS RN

Butanoic acid, 2-[(2,4,6-trinitrophenyl)amino]- (CA INDEX NAME) CN

OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)

L11 ANSWER 50 OF 94 HCAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 1977:42730 HCAPLUS

DOCUMENT NUMBER: 86:42730

ORIGINAL REFERENCE NO.: 86:6797a,6800a

TITLE: Use of the SNAr reaction for transformation of halonitrobenzene derivatives into biologically active

agrochemicals

AUTHOR(S): Ejmocki, Zdzislaw
CORPORATE SOURCE: Inst. Chem. Technol. Org., Politech. Warsaw, Warsaw,

Pol.

SOURCE: Prace Naukowe - Politechnika Warszawska, Chemia

(1975), 17, 93 pp. CODEN: PNPWBQ; ISSN: 0137-2300

DOCUMENT TYPE: Journal

LANGUAGE: Polish

SO2CH3-nX1n

AB Examination of the influence of SO2CH3-nXIn groups (XI = Br or Cl, n = 0, 1 or 2) in nucleophilic substitution reactions of halobenzenes and nitrohalobenzenes I (R = H or NO2; X = Br, Cl or iodine; XI = Br or Cl; n = 0, 1 or 2) showed that these groups enhanced the displacement of aromatic halogen, while the halogen of the halomethyl groups resisted displacement. A substitution reaction mechanism involving a Meisenheimer σ-complex was suggested. All of the 150 compds. prepared were characterized and a number were found effective as fungicides and herbicides.

IT 61497-19-6P

RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

RN 61497-19-6 HCAPLUS

CN Butanoic acid, 2-[[4-[(dichloromethyl)sulfonyl]-2-nitrophenyl]amino]- (CA INDEX NAME)

L11 ANSWER 51 OF 94 HCAPLUS COPYRIGHT 2010 ACS on STN 1976:107087 HCAPLUS

ACCESSION NUMBER: DOCUMENT NUMBER:

84:107087

ORIGINAL REFERENCE NO.: 84:17455a,17458a

TITLE: Coupling components for azo dyes BASF A.-G., Fed. Rep. Ger. Jpn. Kokai Tokkyo Koho, 16 pp. PATENT ASSIGNEE(S): SOURCE:

CODEN: JKXXAF DOCUMENT TYPE:

Patent LANGUAGE: Japanese FAMILY ACC. NUM. COUNT: 15

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
JP 49094677 JP 52046230		19740909 19771122	JP 1972-125836		19721216
US 29640	E	19780523	US 1976-711863		19760805
PRIORITY APPLN. INFO.:			DE 1970-2062717	A	19701219
			DE 1971-2156545	A	19711115
			US 1971-209431	A2	19711217
			DE 1972-2211663	A	19720310
			DE 1972-2216570	A	19720406
			DE 1972-2226933	A	19720602
			DE 1972-2251702	A	19721021
			DE 1972-2251719	A	19721021
			DE 1972-2258823	A	19721201
			DE 1972-2259103	A	19721202
			DE 1972-2259684	A	19721206
			DE 1972-2260827	A	19721213
			GB 1972-57442	A	19721213
			JP 1972-125836	A	19721216
			DE 1972-2263458	A	19721227
			US 1973-328459	A5	19730131

For diagram(s), see printed CA Issue.

Coupling components I (R, R3 = alkyl, cycloalkyl, aryl, or O-containing AB aliphatic

groups; R1 = H, alkyl; R2 = CN, CONH2) for azo dyes are prepared by reaction of chloropyridine derivs. II (R4 = C1, RNH) with R3NH2. Thus, 187 parts II (R1 = Me, R2 = CN, R4 = C1) [875-35-4] in 500 parts MeOH was heated 5-6 hr at 40-5° with 80 parts HOCH2CH2CH2NH2 [141-43-5] in the presence of 100 parts Et3N, diluted with 1000 parts H2O and acidified with 50 parts concentrated HCl to give 210 parts II (R1 = Me, R2 = CN on left, R4 = NHCH2CH2OH) [52982-62-4] containing traces of its isomer, as a colorless powder. This powder (125 parts) was stirred 6 hr with 300 parts

MeOCH2CH2NH2 [109-85-3] to give I (R = CH2CH2OMe, R1 = Me, R2 = CN, R3 = CH2CH2OH) [38841-87-1] containing traces of its isomer. By similar means an addnl. 42 II (R2 = Cn), 14 II (R = CONH2), 272 I (R2 = CN), and 67 I (R2 = CONH2) were prepared I (R = MeOCH2CH2, R1 = Me, R2 = CN, R3 = CH2CH2Ph) [58445-83-3] was hydrolyzed with 90% H2SO4 at 80-100° for 6-8 hr to give I (R, R1, R3 unchanged, R2 = CONH2) [52981-95-0], which coupled with diazotized p-02NC6H4NH2 to give a red dve.

52983-60-5P

RL: IMF (Industrial manufacture); PREP (Preparation) (preparation of)

RN 52983-60-5 HCAPLUS

CN 3-Pyridinecarbonitrile, 6-[[1-(hydroxymethyl)propyl]amino]-2-[(2-hydroxy-2phenylethyl)amino]-4-methyl- (CA INDEX NAME)

OS.CITING REF COUNT: THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD 2 (2 CITINGS)

L11 ANSWER 52 OF 94 HCAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1975:508362 HCAPLUS

DOCUMENT NUMBER: 83:108362

ORIGINAL REFERENCE NO.: 83:16933a,16936a

TITLE: Chemotherapeutically active nitro compounds. 1.

Nitroanilines

AUTHOR(S): Winkelmann, E.; Raether, W.; Dittmar, W.; Duewel, D.; Gericke, D.; Hohorst, W.; Rolly, H.; Schrinner, E. CORPORATE SOURCE: Hoechst A.-G., Frankfurt/Main, Fed. Rep. Ger.

SOURCE: Arzneimittel-Forschung (1975), 25(5), 681-708

CODEN: ARZNAD; ISSN: 0004-4172

DOCUMENT TYPE: Journal LANGUAGE: German

GI For diagram(s), see printed CA Issue.

AB Of 201 nitro compds. tested, mostly basic disubstituted nitroanilines, a number were active in vitro or in vivo against bacteria, fungi, protozoa, helminths, viruses, and tumors. The activity against viruses probably resulted from increased interferon production by the host animal. The compds. with antitumor activity were effective against ascites tumors but not against solid tumors, indicating a low therapeutic index. The compds. active against protozoa and helminths also showed a low therapeutic index. Among the most active compds. were: 4-chloro-6-[(3-diethylamino-2-hydroxypropyl)amino]-1,3-dinitrobenzene [17220-91-6] and 1,2-bis(5-chloro-2,4-dinitroanilino)ethane [56225-11-7] against dermatophytes and Candida albicans in vitro;

6-[(2-diethylaminoethyl)amino]-1,3-dinitro-4-methoxybenzene [17215-71-3] against Trichomonas fetus peritonitis in mice;

bis[4-[(2-diethylaminoethyl)amino]-3-nitrophenyl] sulfone dihydrochloride

[56225-14-0] against Entamoeba histolytica liver necrosis in hamsters; 4-chloro-1,3-dinitro-6-(4-hydroxyphenylamino)benzene [56224-39-6] against coccidiosis in chicks; 4,6-bis[(2-dimethylaminopropyl)amino]-1,3-dinitrobenzene-2HC1 (1) [17215-65-5] against Schistosoma mansoni in mice; 4,6-bis[(2-diethylaminoethyl)amino]-1,3-dinitrobenzene-2HC1 [17215-46-2] and I against a variety of viruses in mice; and 4-chloro-1,3-dinitro-6-[4-(2-hydroxyethyl)pioerazino|benzene [56224-38-5]

against Ehrlich carcinoma in mice. IT 56224-49-8P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(preparation and anthelmintic and antimicrobial and antitumor activity of)  ${\tt RN} - 56224 - 49 - 8 - {\tt HCAPLUS}$ 

CN 1-Butanol, 2,2'-[(4,6-dinitro-1,3-phenylene)diimino]bis- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} \text{O}_2\text{N} & \text{NO}_2 \\ \text{HO-CH}_2 & \text{NH-CH-Et} \\ \text{Et-CH-NH} & \text{NH-CH-Et} \\ \text{CH}_2-\text{OH} \end{array}$$

OS.CITING REF COUNT: 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD (4 CITINGS)

L11 ANSWER 53 OF 94 HCAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1975:461736 HCAPLUS DOCUMENT NUMBER: 83:61736

ORIGINAL REFERENCE NO.: 83:9757a,9760a

TITLE: Coupling components for azo dyes INVENTOR(S): Dehnert, Johannes; Lamm, Gunther PATENT ASSIGNEE(S): BASF A.-G.

SOURCE: Ger. Offen., 56 pp.

CODEN: GWXXBX
DOCUMENT TYPE: Patent

LANGUAGE: German FAMILY ACC. NUM. COUNT: 15

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
DE 2260827 DE 2260827	A1 B2	19740711 19800320	DE 1972-2260827	-	19721213
DE 2260827 US 29640 PRIORITY APPLN. INFO.:	C3 E	19801113 19780523	US 1976-711863 DE 1970-2062717 DE 1971-2156545		19760805 19701219 19711115
			US 1971-209431	A2	19711217
			DE 1972-2211663 DE 1972-2216570		19720310 19720406
			DE 1972-2226933	A	19720602
			DE 1972-2251702	A	19721021

DE	1972-2251719	A	19721021
DE	1972-2258823	Α	19721201
DE	1972-2259103	A	19721202
DE	1972-2259684	A	19721206
DE	1972-2260827	A	19721213
GB	1972-57442	A	19721213
JP	1972-125836	Α	19721216
DE	1972-2263458	A	19721227
US	1973-328459	A5	19730131

For diagram(s), see printed CA Issue.

AB Azo coupler (I, R = CN, CONH2; R1 = H, alkyl, substituted alkyl, cycloalkyl; R2 = H, alkyl, substituted alkyl, Ph, substituted Ph, cycloalkyl) were prepared Thus, 2,6-dichloro-3-cyano-4-methylpyridine was suspended in MeOH and heated with HOCH2CH2NH2 in the presence of Et3N at 45-50° for 5-6 hr to give a mixture consisting predominantly of 6-chloro-3-cyano-2-[(2-hydroxyethyl)amino]-4-methylpyridine which was refluxed with MeOCH2CH2NH2 to give a mixture predominantly of pyridine coupler (I, R = CN, R1 = MeOCH2CH2, R2 = HOCH2CH2). The other I were similarly prepared

52983-60-5P

RL: IMF (Industrial manufacture); PREP (Preparation) (preparation of)

52983-60-5 HCAPLUS

CN 3-Pyridinecarbonitrile, 6-[[1-(hydroxymethyl)propyl]amino]-2-[(2-hydroxy-2phenylethyl)amino]-4-methyl- (CA INDEX NAME)

OS.CITING REF COUNT: THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L11 ANSWER 54 OF 94 HCAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1975:444734 HCAPLUS DOCUMENT NUMBER: 83:44734

ORIGINAL REFERENCE NO.: 83:7095a,7098a

TITLE: Substituted 2,6-diamino-4-methylnicotinonitriles, the

corresponding nicotinamides and derivatives

INVENTOR(S): Lamm, Gunther; Dehnert, Johannes

PATENT ASSIGNEE(S): BASF A.-G., Fed. Rep. Ger.

SOURCE: U.S., 19 pp.

CODEN: USXXAM DOCUMENT TYPE: Patent

LANGUAGE: English FAMILY ACC. NUM. COUNT: 15

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

US 3853895	A	19741210	US 1973-328		19730131
US 29640	E	19780523	US 1976-711	.863	19760805
PRIORITY APPLN. IN	70.:		DE 1970-206	2717 A	19701219
			DE 1971-215	6545 A	19711115
			US 1971-209	431 A2	19711217
			DE 1972-221	1663 A	19720310
			DE 1972-221	.6570 A	19720406
			DE 1972-222	6933 A	19720602
			DE 1972-225	1702 A	19721021
			DE 1972-225	1719 A	19721021
			DE 1972-225	8823 A	19721201
			DE 1972-225	9103 A	19721202
			DE 1972-225	9684 A	19721206
			DE 1972-226	0827 A	19721213
			GB 1972-574	42 A	19721213
			JP 1972-125	836 A	19721216
			DE 1972-226	3458 A	19721227
			US 1973-328	459 A5	19730131

- GI For diagram(s), see printed CA Issue.
- AB Diaminopyridine couplers (I, R,R2 = H, alkyl, substituted alkyl, Ph, substituted Ph, cycloalkyl, norbornyl, arylalkyl, R1 = CN, CONH2) were prepared and were useful for preparation of azo dyes by coupling with

diazotized

- amines. Thus, 2,6-dichloro-3-cyano-4-methylpyridine [875-35-4] was suspended in MeOH, HOCHZCHZNHZ [141-43-5] was added, the mixture stirred at 45-50° for 5-6 hr to give predominantly 6-chloro-3-cyano-2-[(2-hydroxyethyl)amino]-4-methylpyridine [52982-62-4]
- which was refluxed in MeOCH2CH2NH2 [109-85-3] to give coupler [R = MeOCH2CH2, Rl = CN, R2 = HOCH2CH2) [55635-93-3]. The other 200 I were similarly prepared
- IT 52983-60-5P
  - RL: IMF (Industrial manufacture); PREP (Preparation) (preparation of)
- RN 52983-60-5 HCAPLUS
- CN 3-Pyridinecarbonitrile, 6-[[1-(hydroxymethyl)propyl]amino]-2-[(2-hydroxy-2-phenylethyl)amino]-4-methyl- (CA INDEX NAME)

OS.CITING REF COUNT: 8 THERE ARE 8 CAPLUS RECORDS THAT CITE THIS RECORD
(8 CITINGS)

L11 ANSWER 55 OF 94 HCAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 1974:96332 HCAPLUS DOCUMENT NUMBER: 80:96332 ORIGINAL REFERENCE NO.: 80:15507a,15510a

TITLE: Partial asymmetric syntheses of amino acids using

lithium aldimine precursors

AUTHOR(S): Hirowatari, N.; Walborsky, H. M.

CORPORATE SOURCE: Dep. Chem., Florida State Univ., Tallahassee, FL, USA SOURCE: Journal of Organic Chemistry (1974), 39(5), 604-7

CODEN: JOCEAH; ISSN: 0022-3263

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Carboxylation or carbethoxylation of Li aldimines PhCMeEth:CRLi (R = MeCHEt, Et, CHMe2) formed by the α addition of EtLi, MeCHEtLi, or Me2CHLi to (±) - or (R)-(+)-PhCMeEthC gave the corresponding α-imino acids or esters which were reduced to the α-amino

acids. 4470-69-3P

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of) RN 4470-69-3 HCAPLUS

CN Butanoic acid, 2-[(2,4-dinitrophenyl)amino]-, (2S)- (CA INDEX NAME)

## Absolute stereochemistry.

OS.CITING REF COUNT: 5 THERE ARE 5 CAPLUS RECORDS THAT CITE THIS RECORD (5 CITINGS)

L11 ANSWER 56 OF 94 HCAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1973:97984 HCAPLUS DOCUMENT NUMBER: 78:97984 ORIGINAL REFERENCE NO.: 78:15735a,15738a

TITLE: Sterically controlled syntheses of optically active

organic compounds. XVIII. Asymmetric syntheses of optically active amino acids by addition of hydrogen

cyanide to Schiff bases
AUTHOR(S): Harada, Kaoru; Okawara, Tadashi

CORPORATE SOURCE: Inst. Mol. Cell. Evol., Univ. Miami, Coral Gables, FL,

SOURCE: Journal of Organic Chemistry (1973), 38(4), 707-10

CODEN: JOCEAH: ISSN: 0022-3263

DOCUMENT TYPE: Journal LANGUAGE: English

ABA Addition reactions of HCN to Schiff bases which were prepared from several aliphatic aldehydes and optically active benzylic amines were studied. The addition products were hydrolyzed and hydrogenolyzed to form optically active amino acids. The synthetic yields of amino acids were in a range of 9-58% and the optical purities of amino acids without fractionation of optical isomers were in a range of 22-58%. When

 $(R)-\alpha$ -alkylbenzylamines were used, (R)-amino acids were obtained.

The fractionation of optical isomers during isolation and purification was examined

6367-34-6P

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of) 6367-34-6 HCAPLUS

CN Butanoic acid, 2-1(2,4-dinitrophenyl)aminol-, (2R)- (CA INDEX NAME)

## Absolute stereochemistry.

THERE ARE 18 CAPLUS RECORDS THAT CITE THIS OS.CITING REF COUNT: 18 RECORD (18 CITINGS)

L11 ANSWER 57 OF 94 HCAPLUS COPYRIGHT 2010 ACS on STN 1973:97981 HCAPLUS

ACCESSION NUMBER: DOCUMENT NUMBER: 78:97981

ORIGINAL REFERENCE NO.: 78:15735a,15738a

TITLE: Sterically controlled synthesis of optically active organic compounds. XVII. Asymmetric syntheses of amino acids by addition of benzoyl cyanide to the

azomethine compounds

AUTHOR(S): Harada, Kaoru; Okawara, Tadashi CORPORATE SOURCE: Inst. Mol. Cell. Evol., Univ. Miami, Coral Gables, FL,

USA

SOURCE: Bulletin of the Chemical Society of Japan (1973),

46(1), 191-3

CODEN: BCSJA8; ISSN: 0009-2673

Journal

DOCUMENT TYPE:

LANGUAGE: English

The addition reactions of PhCOCN with Schiff's bases prepared from aliphatic aldehydes and optically active benzylic amines were studied. The addition products were hydrolyzed and hydrogenolyzed to optically active amino acids in yields of 15-57% with optical purities of 15-37%. When S-α-alkylbenzylamines were used, S-amino acids were obtained.

31356-29-3P

RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)

31356-29-3 HCAPLUS RN

Butanoic acid, 2-[(2,4-dinitrophenyl)amino]- (CA INDEX NAME)

OS.CITING REF COUNT: THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L11 ANSWER 58 OF 94 HCAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 1971:448107 HCAPLUS

DOCUMENT NUMBER:

75:48107

ORIGINAL REFERENCE NO.: 75:7585a,7588a

TITLE: Steric acceleration of a ring closure to an

oxazepinone by steric hindrance AUTHOR(S): Turk, Jonathan; Haney, William M.; Heid, Georgia;

Barlow, Richard E.; Clapp, Leallyn B.

CORPORATE SOURCE: Dep. Chem., Brown Univ., Providence, RI, USA Journal of Heterocyclic Chemistry (1971), 8(1), 149-51

SOURCE: CODEN: JHTCAD: ISSN: 0022-152X

DOCUMENT TYPE: Journal English

LANGUAGE:

For diagram(s), see printed CA Issue.

The gem-dialkyl substitution of benzoic acids,

2,4,6-HOCH2CRR1NH(O2N)2C6H2CO2H, accelerates closure to the corresponding 1,2,3,5-tetrahydro-5-oxo-4,1-benzoxazepines (I).

5-Nitro-1-(2-hydroxyethyl)benzotriazole-7-carboxylic acids (II) in the same manner. 9-Nitro-7-oxo-v-triazolo[4,5,1-jk][4,1]benzoxazepines (III)

are prepared The acceleration is greater in the case of II. 33414-90-3P

RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)

RN 33414-90-3 HCAPLUS

CN Benzenemethanaminium, N,N,N-trimethyl-,

2-[[1-(hydroxymethyl)propyl]amino]-3,5-dinitrobenzoate (1:1) (CA INDEX NAME)

CM

CRN 47141-03-7 CMF C11 H12 N3 O7

CM

CRN 14800-24-9 CMF C10 H16 N

Mea+N-CHa-Ph

OS.CITING REF COUNT: THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L11 ANSWER 59 OF 94 HCAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 1971:60669 HCAPLUS

DOCUMENT NUMBER: 74:60669

ORIGINAL REFERENCE NO.: 74:9753a,9756a

TITLE: Chromatography of dinitrophenylamino acids and heterocyclic bases on thin layers of protein

AUTHOR(S): Brady, P. R.; Hoskinson, R. M.

CORPORATE SOURCE: Div. Text. Ind., C.S.I.R.O., Belmont, Australia SOURCE: Journal of Chromatography (1971), 54(1), 65-70 CODEN: JOCRAM; ISSN: 0021-9673

DOCUMENT TYPE: Journal

LANGUAGE: English

Rf values are given for 24 dinitrophenyl (DNP) amino acid derivs. on unmodified and esterified keratin thin layers (P. R. Brady and R. M. Hoskinson, 1971) and for 12 pyrimidines and 7 purines on the esterified keratin layers. Two-dimensional development with 3:2:1 BuOH-H2O-HOAc and 5:1 tert-amvl alc.-0.88 NH3 separated 14 DNP amino acids on the unmodified keratin lavers.

31356-29-3

RL: ANT (Analyte); ANST (Analytical study)

(chromatog. of) 31356-29-3 HCAPLUS

RN Butanoic acid, 2-[(2,4-dinitrophenyl)aminol- (CA INDEX NAME) CN

L11 ANSWER 60 OF 94 HCAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1970:505492 HCAPLUS DOCUMENT NUMBER: 73:105492 ORIGINAL REFERENCE NO.: 73:17167a,17170a

TITLE:

Mass spectrometry of DNP [2,4-dinitrophenyl]-amino acids combination with paper chromatography AUTHOR(S): Studier, Martin H.; Moore, Leon P.; Havatsu, Rvoichi;

Matsuoka, Sumiko

CORPORATE SOURCE: Chem. Div., Argonne Nat. Lab., Argonne, IL, USA SOURCE:

Biochemical and Biophysical Research Communications (1970), 40(4), 894-900

CODEN: BBRCA9; ISSN: 0006-291X

DOCUMENT TYPE: Journal LANGUAGE: English

AR The DNP derivs, of 20 amino acids were prepared and their mass spectra determined

The anal. application of the combination of mass spectrometry and paper chromatog, was demonstrated.

4470-69-3

RL: PRP (Properties)

(mass spectrum of) 4470-69-3 HCAPLUS

CN Butanoic acid, 2-[(2,4-dinitrophenyl)amino]-, (2S)- (CA INDEX NAME)

Absolute stereochemistry.

OS.CITING REF COUNT: THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD 2 (2 CITINGS)

L11 ANSWER 61 OF 94 HCAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1970:121890 HCAPLUS DOCUMENT NUMBER: 72:121890

ORIGINAL REFERENCE NO.: 72:21943a,21946a

TITLE:

Sterically controlled syntheses of optically active compounds. IX. Syntheses of optically active amino

acids by reduction of Schiff bases with sodium

borohydride AUTHOR(S):

Harada, Kaoru; Ohhashi, Junichi CORPORATE SOURCE: Inst. of Mol. Evol., Univ. of Miami, Coral Gables, FL,

USA

SOURCE: Bulletin of the Chemical Society of Japan (1970), 43(3), 960-3

CODEN: BCSJA8: ISSN: 0009-2673

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The Schiff bases of  $\alpha$ -oxo acids with optically active

α-alkylbenzylami nes were reduced with NaBH4, and the reduced compds. were hydrogenolyze d and hydrolyzed to give α-amino acids, which were coverted to their corresponding DNP-amino acids by treatment with 2,4-dinitrofluorobenzene. The yields of the asym. synthesis and the

optical purity of synthesized amino acids were rather low.

4470-69-3P

RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)

4470-69-3 HCAPLUS

Butanoic acid, 2-[(2,4-dinitrophenyl)amino]-, (2S)- (CA INDEX NAME)

Absolute stereochemistry.

L11 ANSWER 62 OF 94 HCAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 1970:32100 HCAPLUS

DOCUMENT NUMBER: 72:32100

ORIGINAL REFERENCE NO.: 72:5901a,5904a

TITLE: Absolute configurations of the alkaloids of Physostigma venenosum seeds

AUTHOR(S): Longmore, R. B.; Robinson, Brian

CORPORATE SOURCE: Dep. Pharm., Univ. Manchester, Manchester, UK

SOURCE: Journal of Pharmacy and Pharmacology (1969), 21 (Suppl.), 118-25

CODEN: JPPMAB; ISSN: 0022-3573 DOCUMENT TYPE: Journal

LANGUAGE: English

The absolute configuration of physostigmine was established by correlating the configuration of its C-3a atom with that of the asymmetric C atom in

(+)-3-ethyl-3-methoxycarbonyl-3-methylpropionic acid. Comparison of the ORD spectra of physostigmine, Na-norphysostigmine, geneserine, physovenine and eseramine have shown that all five alkaloids have the same absolute

configurations. 25471-53-8P

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of)

RN 25471-53-8 HCAPLUS

CN Isovaline, N-(2,4-dinitrophenyl)-, (DL)- (8CI) (CA INDEX NAME)

L11 ANSWER 63 OF 94 HCAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1967:464664 HCAPLUS DOCUMENT NUMBER: 67:64664

ORIGINAL REFERENCE NO.: 67:12207a,12210a

TITLE: Synthesis of optically active  $\alpha$ -amino-acids from

α-oxo acids by hydrogenolytic asymmetric

transamination

AUTHOR(S): Harada, Kaoru CORPORATE SOURCE: Univ. of Miami, Coral Gables, FL, USA

SOURCE: Nature (London, United Kingdom) (1966), 212(5070),

1571-2

CODEN: NATUAS; ISSN: 0028-0836

DOCUMENT TYPE: Journal LANGUAGE: English

B MeCH2COCO2H (1.02 g.) and 1.51 g. L-phenylglycine, [α]25D

168° (5N HC1), were dissolved in a mixture of 10.0 ml. 2N NaOH and 10 ml. H2O. After standing 30 min. at room temperature, the solution was

hydrogenated

and hydrogenolyzed with 2.50 g. 10% Pd/C (initial pressure 40 lb.). After 24 hrs. of reaction, the catalyst was removed by filtration. The catalyst was washed repeatedly with H2O. The filtrate was concentrated, to .apprx.25

and 6N HCl was added to bring the pH to .apprx.1. The precipitated PhCH2CO2H

was extracted with ether. The aqueous solution was evaporated to dryness. The amino

acid-HCl was extracted with absolute alc. and the insol. NaCl filtered off.

The

alc. solution was evaporated to dryness and the remaining amino acid-HCl dissolved in 15 ml. H2O. The aqueous solution was applied to a Dowex column (H form, 100-200 mesh, 2 cm. + 13 cm.). MeCH2CH(OH)CO2H and other non-amino acid acidic materials were eluted with H2O, and MeCH2CH(NH2)CO2H was then eluted with N aqueous NH3 to give 0.36 g. precipitate,  $[\alpha]25D$  7,3°.

IT 4470-69-3P

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of)

RN 4470-69-3 HCAPLUS

CN Butanoic acid, 2-[(2,4-dinitrophenyl)amino]-, (2S)- (CA INDEX NAME)

Absolute stereochemistry.

OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD
(3 CITINGS)

L11 ANSWER 64 OF 94 HCAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1967:422127 HCAPLUS

DOCUMENT NUMBER: 67:22127 ORIGINAL REFERENCE NO.: 67:4243a

TITLE: Sterically controlled synthesis of optically active

organic compounds. V. Sterically controlled synthesis of optically active  $\alpha$ -amino acids from

 $\alpha$ -oxo acids by reductive amination

AUTHOR(S): Harada, Kaoru; Matsumoto, Kazuo

CORPORATE SOURCE: Univ. of Miami, Coral Gables, FL, USA

SOURCE: Journal of Organic Chemistry (1967), 32(6), 1794-800

CODEN: JOCEAH; ISSN: 0022-3263

DOCUMENT TYPE: Journal LANGUAGE: English

LANGUAGE: English

AB To clarify the steric courses of the asym. syntheses of  $\alpha$ -amino acids from  $\alpha$ -oxo acids with optically active amines, 3 kinds of

reactions were carried out: (A) hydrogenation of the Schiff bases of  $\alpha$ -oxo acids with (R,S)- $\alpha$ -methylbenzylamine and with

 $(R,S)-\alpha$ -ethylbenzylamine; (B) (1) hydrogenation of oximes of

N-(R,S)-α-methylbenzylbenzoyl-formamide and of

 $\mathbb{N}-(R,S)-\alpha-\text{ethylbenzylbenzoylformamide}$ ; (2) hydrogenation of benzylamine Schiff bases of pyruvyl-(S)-alanine iso-Bu ester and of pyruvyl-(R)-and-(S)-valine iso-Bu ester; (C) hydrogenation of the Schiff

bases of 1-methyl pyruvate with (R,S)- $\alpha$ -methylbenzylamine and with (R,S)- $\alpha$ -ethylbenzylamine. In each reaction, possible steric courses

are discussed. 26 references.

IT 4470-69-3P

RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

RN 4470-69-3 HCAPLUS

CN Butanoic acid, 2-[(2,4-dinitrophenyl)amino]-, (2S)- (CA INDEX NAME)

## Absolute stereochemistry.

OS.CITING REF COUNT: 10 THERE ARE 10 CAPLUS RECORDS THAT CITE THIS

RECORD (10 CITINGS)

L11 ANSWER 65 OF 94 HCAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 1967:422126 HCAPLUS

DOCUMENT NUMBER: 1967:422

ORIGINAL REFERENCE NO.: 67:4242h,4243a

TITLE: Sterically controlled syntheses of optically active organic compounds. IV. Syntheses of optically active

α-amino acids from α-oxo acids by

hydrogenolytic asymmetric transamination Harada, Kaoru

AUTHOR(S): Harada, Kaoru CORPORATE SOURCE: Univ. of Miami, Coral Gables, FL, USA

SOURCE: Journal of Organic Chemistry (1967), 32(6), 1790-3

CODEN: JOCEAH; ISSN: 0022-3263

DOCUMENT TYPE: Journal LANGUAGE: English

AB cf. CA 65: 3956c, 13816b. Na  $\alpha$ -phenylglycinate was found to be hydrogenolyzed easily to NH3 and phenylacetic acid using Pd as the catalyst. By the use of this result, asym. syntheses of  $\alpha$ -amino acids from their corresponding  $\alpha$ -oxo acids with optically active

\alpha-phenylqlycine in aqueous alkaline solution were investigated. Optically active alanine,  $\alpha$ -aminobutyric acid. glutamic acid, and aspartic acid were synthesized. Optical purities of these synthesized amino acids

were in the range of 40 to 60%.

4470-69-3P

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of)

RM 4470-69-3 HCAPLUS

CN Butanoic acid, 2-[(2,4-dinitrophenyl)amino]-, (2S)- (CA INDEX NAME)

Absolute stereochemistry.

$${\tt HO_2C\_S\_Et}$$

OS.CITING REF COUNT: THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD 1 (1 CITINGS)

L11 ANSWER 66 OF 94 HCAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1967:16957 HCAPLUS DOCUMENT NUMBER: 66:16957

ORIGINAL REFERENCE NO.: 66:3255a,3258a

TITLE:

Gas chromatographic separation of dinotrophenyl amino acids and its application to the analysis of serum

amino acids Ikekawa, Nobuo; Hoshino, Osamu; Watanuki, Reiko

AUTHOR(S): CORPORATE SOURCE: Inst. Phys. Chem. Res., Tokyo, Japan

SOURCE: Analytical Biochemistry (1966), 17(1), 16-23

CODEN: ANBCA2; ISSN: 0003-2697

DOCUMENT TYPE: Journal

LANGUAGE: English

A method for the separation and estimation of dinitrophenyl (DNP) derivs. of 13 amino acids by a gas chromatographic technique is described. The separation was carried out with 1.0% XE-61 or 1.5% SE-30 as the stationary phase, and with a H flame ionization detector and temperature programmer. A method for

the determination of the free amino acids in serum by gas chromatography was also investigated. 17 references.

31356-29-3

RL: ANT (Analyte); ANST (Analytical study)

(chromatog. of)

31356-29-3 HCAPLUS RN

CN Butanoic acid, 2-[(2,4-dinitrophenyl)amino]- (CA INDEX NAME)

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L11 ANSWER 67 OF 94 HCAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 1966:421096 HCAPLUS
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DOCUMENT NUMBER: 65:21096

ORIGINAL REFERENCE NO.: 65:3956d-h,3957a

TITLE: Synthesis of tripeptides of serine and lysine with

different sequences of the amino acids
AUTHOR(S): El Naggar, Akhmed M.; Poddubnaya, N. A.

SOURCE: Sintez Prirodn. Soedin., ikh Analogov i Fragmentov,
Akad. Nauk SSSR, Otd. Obshch. i Tekhn. Khim. (1965)

DOCUMENT TYPE: Journal

LANGUAGE: Russian

In order to study the fragments obtained from peptide antibiotics, the synthesis of di- and tripeptides containing lysine and serine is described. Dipeptides are prepared by reaction of formyl and carbobenzoxy (Cbz) derivs. of one amino acid with the Me ester of the other in the presence of dicyclohexylcarbodimide. The resulting dipeptide ester is converted by reaction with N2H4.H2O to the hydrazide which is then treated with NaNO2 in an acid to obtain the azide. Reaction of the azide with an amino acid esters gives the tripeptide derivative To a solution of 2 g. Nmc-Cbz-DL-pserine, 2.8 g. Me seter of Nmc-Cbz-DL-jyine-HCl, and 1.2 ml. absolute MeNN in 40 ml. absolute MeNO2 was added 2 g. dicyclohexylcarbodimide. The solution was heated 30 min. to 40° and then allowed to stand overnight. After removing the precipitated dicyclohexylurea by filtration, the filtrate was evaporated in vacuo. The oily residue was dissolved in EtOAc and Me3N.HCl filtered off. The

to give
4.2 g. Me ester of N-Cbz-DL-seryl-Ns-Cbz-DL-lysine (I), m.
150-2°. Similarly prepared were the Me esters of
Nα-formyl-Ns-Cbz-Dl-lysyl-Ns-Cbz-DL-lysine (m.
75-8°, yield 87%), and Nα-formyl-Ns-Cbz-DL-lysyl-DLserine, m. 118-20°, yield 59%.
Nα-formyl-Ns-Cbz-DL-lysine was prepared from

Ns-Cbz-DL-lysine by treatment with 100% HCO2H and Ac2O. To a solution of 2 g, I in 35 ml. absolute hot MeOH was added 1.02 ml. N2H4.H2O and the mixture allowed to stand 48 hrs. at room temperature The 1.2 g, of the N-Cbz-DL-seryl-Ns-Cbz-DL-lysine hydrazide (II)  $(m. 165-8^{\circ})_1$ .

which precipitated, plus 0.5 g. obtained by concentration of the mother liquor

total yield of 1.7 g. Similarly prepared were Na-formyl-Ns-Cbz-DL-lysyl-Ns-Cbz-DL-lysine hydrazide, m. 162-3°, yield 88%, and Na-formyl-Ns-Cbz-DL-lysyl-DL-serine hydrazide, m.

 $N\alpha$ -formyl-Ns-CDz-DL-lysyl-DL-serine hydrazide, m.  $184-6^\circ$ , yleid 888. To a cold  $(-5^\circ$  to  $-10^\circ$ ) solution of 1 g. II in 40 ml. H2O, 3 ml. AcOH, and 1 ml. concentrated HCI, was added a cold solution of 0.3 g. NaNO2 in 5 ml. H2O. The resulting mixture was stirred 5

min. and the azide extracted with 35 ml. cold EtOAc. The EtOAc extract was washed quickly with ice water, 3% aqueous NaHCO3 at 0°, and twice again with ice water. The extract was dried 20 min. over Na2SO4 in the cold. A solution of Me ester of serine was freshly prepared from 0.5 q. of its HCl salt in 10 ml. absolute CHCl3 by addition of 0.35 ml. absolute Me3N and stirring 25

Addition of absolute Et20 precipitated Me3N.HCl which was filtered off. The

residue from the filtrate after evaporation of the solvent in vacuo was dissolved in 15 ml. absolute EtOAc and cooled to 0°. To this cold solution of the ester was added the solution of the azide. After standing at room temperature 24

hrs.,

the mixture was washed twice with 0.5N HCl, twice with 3% aqueous NaHCO3, and with water. After removal of the solvent the residue was crystallized by trituration with petroleum ether to give 0.8 g. Me ester of N-Cbz-DL-seryl-Ne-Cbz-DL-lysyl-DL-serine, m. 89-90°. Similarly prepared were (m.p. and % yield given): Me esters of Na-formyl-Ne-Cbz-DL-lysyl-Ne-Cbz-DL-lysyl-Ne-Cbz-DL-lysine, 112-14°, 60; Nα-formvl-Nε-Cbz-DL-lvsvl-DL-servl-DL-serine, 100-1°, 40; N-Cbz-DL-servl-DL-servl-Ne-Cbz-DL-lysine, 90-2°, 72; N-Cbz-DL-seryl-Ne-Cbz-DL-lysyl-Ne-Cbz-DL-lysine, 101-2°, 85; and Nα-formyl-Nε-Cbz-DL-lysyl-DL-seryl-Ne-Cbz-DL-lysine, 99-100°, 56 31356-29-3

(Derived from data in the 7th Collective Formula Index (1962-1966))

RN 31356-29-3 HCAPLUS

CN Butanoic acid, 2-[(2,4-dinitrophenyl)amino]- (CA INDEX NAME)

L11 ANSWER 68 OF 94 HCAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1966:421095 HCAPLUS

DOCUMENT NUMBER: 65:21095 ORIGINAL REFERENCE NO.: 65:3956c-d

TITLE: Stereoselective syntheses of optically active amino

acids from menthyl esters of a-oxo acids Matsumoto, Kazuo; Harada, Kaoru AUTHOR(S):

Univ. of Miami, Coral Gables, FL CORPORATE SOURCE:

SOURCE: Journal of Organic Chemistry (1966), 31(6), 1956-8 CODEN: JOCEAH; ISSN: 0022-3263

DOCUMENT TYPE: Journal LANGUAGE: English

OTHER SOURCE(S): CASREACT 65:21095

AB Menthyl esters of pyruvic acid, α-oxobutyric acid, and phenylglyoxylic acid were converted to their oximes and Schiff bases of

benzylamine. These were hydrogenated catalytically by the use of Pd-C and palladium hydroxide on charcoal. Optically active D-alaninc (optical

yield 16-25%), D- $\alpha$ -aminobutyric acid (8-21%), and D-phenyl-glycine (44-49%) were obtained. Possible steric courses of the reactions are discussed. 31356-29-3

RL: PREP (Preparation)

(Derived from data in the 7th Collective Formula Index (1962-1966))

RN 31356-29-3 HCAPLUS

CN Butanoic acid, 2-[(2,4-dinitrophenyl)amino]- (CA INDEX NAME)

OS.CITING REF COUNT: 14 THERE ARE 14 CAPLUS RECORDS THAT CITE THIS RECORD (14 CITINGS)

L11 ANSWER 69 OF 94 HCAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1965:489203 HCAPLUS
DOCUMENT NUMBER: 63:89203

ORIGINAL REFERENCE NO.: 63:16440g-h

TITLE: Amino derivatives of starches. Derivatives of

3,6-diamino-3,6-dideoxy-D-altrose

AUTHOR(S): Wolfrom, M. L.; Hung, Yen-Lung; Horton, Derek CORPORATE SOURCE: Ohio State Univ., Columbus

SOURCE: Journal of Organic Chemistry (1965), 30(10), 3394-400

CODEN: JOCEAH; ISSN: 0022-3263

DOCUMENT TYPE: Journal LANGUAGE: English

OTHER SOURCE(S): CASREACT 63:89203

AB Hydrazinolysis of methyl 2,6-di-O-(methylsulfonyl)-α-Dglucopyranoside, followed by reduction, gives methyl

3,6-diamino-3,6-dideoxy-c-D-altropyranoside, isolable in high yield as the N,N'-diacetyl or N,N'-(2,4-dinitrophenyl) derivatives. The structure and stereochemistry of the product were proved by a sequence of

degradation reactions and by comparison of the products with derivatives of known a-maino acids. 3,6-Diacetamido-3,6-dideoxy-D-altrose was prepared by way of 3,5-diacetamido-3,6-dideoxy-D-altrose diethyl dithioacetal.

IT 4470-69-3

RL: PREP (Preparation)

(Derived from data in the 7th Collective Formula Index (1962-1966))

RN 4470-69-3 HCAPLUS

CN Butanoic acid, 2-[(2,4-dinitrophenyl)amino]-, (2S)- (CA INDEX NAME)

Absolute stereochemistry.

OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L11 ANSWER 70 OF 94 HCAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1965:489202 HCAPLUS DOCUMENT NUMBER: 63:89202

ORIGINAL REFERENCE NO.: 63:16440f-q

TITLE: The acid hydrolysis of laminaran

AUTHOR(S): Szejtli, Jozsef CORPORATE SOURCE:

Tech. Univ. Norway, Trondheim SOURCE:

Acta Chimica Academiae Scientiarum Hungaricae (1965), 45(2), 141-51

CODEN: ACASA2; ISSN: 0001-5407

DOCUMENT TYPE: Journal

LANGUAGE: English

Laminaran was used to investigate the hydrolysis of  $\beta$ -D-(1  $\rightarrow$ 

3)-glucose linkages catalyzed by hydrogen ion. The rate constant of hydrolysis was determined at three different temperatures and three different

concentrations of hydrochloric acid. For the equation, K =

[aH+]ge2.303e-Ea/RT, g was found to have a value of 1.05941 Eo is 31,175 cal./mol. and d is 17.108. The entropy of activation is 9.19 cal./mol.

4470-69-3

RL: PREP (Preparation)

(Derived from data in the 7th Collective Formula Index (1962-1966))

RN 4470-69-3 HCAPLUS

CN Butanoic acid, 2-[(2,4-dinitrophenyl)amino]-, (2S)- (CA INDEX NAME)

# Absolute stereochemistry.

L11 ANSWER 71 OF 94 HCAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1965:442770 HCAPLUS DOCUMENT NUMBER:

63:42770

ORIGINAL REFERENCE NO.: 63:7680a-b

TITLE: Separation of 2,4-dinitrophenol derivatives of amino

acids by high-voltage paper electrophoresis

Fittkau, Siegfried AUTHOR(S):

CORPORATE SOURCE: Martin-Luther Univ., Halle/Saale, Germany

SOURCE: Journal of Chromatography (1965), 18(2), 331-5

CODEN: JOCRAM: ISSN: 0021-9673

DOCUMENT TYPE: Journal

LANGUAGE: German

The electrophoretic mobilities of 31 2,4-dinitrophenol derivs. of amino acids, in pyridine acetate and acetateformate buffers of pH 1.8 to 6.5, at a potential of 67 v./cm., are given. Solns. in the 2 solvents were of approx. the same conductivity and the expts. were conducted with the apparatus described by the author (CA 60, 6493c) on 30 cm. wide + 60 cm. long, Schleicher and Schuell 2043a filter paper, soaked in the buffer and pressed to contain 120% of the dry paper weight The solns. (5 µl. of 0.02M in Me2CO or dimethylformamide) were applied 12 cm. from the cathode side of the paper's edge and a potential of 4000 v. was applied for 120

31356-29-3, Butyric acid, 2-(2,4-dinitroanilino)-

(electrophoresis of)

31356-29-3 HCAPLUS RN

CN Butanoic acid, 2-[(2,4-dinitrophenyl)aminol- (CA INDEX NAME)

L11 ANSWER 72 OF 94 HCAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 1965:442769 HCAPLUS

DOCUMENT NUMBER: 63:42769

ORIGINAL REFERENCE NO.: 63:7679h,7680a TITLE: Thin-film electrophoresis. II. Freeze-drying of

electropherograms AUTHOR(S): Criddle, W. J.; Moody, G. J.; Thomas, J. D. R.

CORPORATE SOURCE: Welsh Coll. Advanced Technol., Cardiff SOURCE: Journal of Chromatography (1965), 18(3), 530-4

CODEN: JOCRAM: ISSN: 0021-9673

DOCUMENT TYPE: Journal LANGUAGE: English

cf. CA 62, 5796h. The zone migration that occurs during the drying stage of electropherograms can be prevented by freeze-drying instead of drying at elevated temps.

31356-29-3

(Derived from data in the 7th Collective Formula Index (1962-1966))

31356-29-3 HCAPLUS RN

CN Butanoic acid, 2-[(2,4-dinitrophenyl)amino]- (CA INDEX NAME)

OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L11 ANSWER 73 OF 94 HCAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1964:18163 HCAPLUS

DOCUMENT NUMBER: 60:18163 ORIGINAL REFERENCE NO.: 60:3256g-h

TITLE: An improved method of separating amino acids as

N-2,4-dinitrophenyl derivatives AUTHOR(S): Matheson, N. A.

CORPORATE SOURCE: Rowett Res. Inst., Aberdeen, UK

SOURCE: Biochemical Journal (1963), 88(1), 146-51

CODEN: BIJOAK; ISSN: 0264-6021

DOCUMENT TYPE: Journal LANGUAGE: Unavailable

AB An improved method of separating ether-soluble dinitrophenol-(DNP)-amino acids by

partition chromatography on short kieselguhr columns is described. DNP-maino acids are partitioned, largely as ions, between aqueous buffers and EtOAc; they form unusually narrow bands with a wide range of R values which are much less dependent on pH than in purely nonionic partition. Columns of this type allow the isolation of almost any one of the common ether-soluble DNP-amino acids from a dinitrophenylated mixture within an hr. or two. The R values of many of the common DNP-amino acids on columns at different pH values are listed.

31356-29-3, Butyric acid, 2-(2,4-dinitroanilino)-

(chromatography of)

RN 31356-29-3 HCAPLUS

CN Butanoic acid, 2-[(2,4-dinitrophenyl)amino]- (CA INDEX NAME)

L11 ANSWER 74 OF 94 HCAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1964:18162 HCAPLUS

DOCUMENT NUMBER: 60:18162
ORIGINAL REFERENCE NO.: 60:3256e-q

TITLE: The determination of catechol amines in biological

materials
AUTHOR(S): Callingham, B. A.; Cass, Rosemary

CORPORATE SOURCE: Univ. London

SOURCE: West-European Symp, Clin, Chem. (1963), 2, 19-30

DOCUMENT TYPE: Journal LANGUAGE: Hnavailable

Biol. and biochem, methods for the determination of catechol amines are

evaluated. Biol. methods are now being replaced by chemical methods of high sensitivity and specificity. The choice of the various 2-step methods for purification depend largely upon the original solvent used and the tissue to be assayed. For the extraction and purification of the catechol amines in urine and blood plasma, adsorption and ion-exchange techniques are used. A strong cation-exchange resin, Dowex 50, is probably the best available method for the separation of dopamine from adrenaline and noradrenaline. Although many colorimetric methods are available for assay of catechol amines much value today is placed on paper chromatography. To obtain sensitivity with specificity, fluorimetric methods of assay are necessary. The 2 main methods utilizing fluorescence for the assay of catechol amines are the trihydroxyindole method and the ethylenediamine condensation method. The latter probably is more sensitive, and when combined with suitable ionexchange columns, may be made very specific. The chemical assay of dopamine is also discussed.

31356-29-3

(Derived from data in the 7th Collective Formula Index (1962-1966)) 31356-29-3 HCAPLUS

Butanoic acid, 2-[(2,4-dinitrophenyl)amino]- (CA INDEX NAME)

L11 ANSWER 75 OF 94 HCAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1964:18161 HCAPLUS DOCUMENT NUMBER: 60:18161

ORIGINAL REFERENCE NO.: 60:3256b-e

TITLE:

A simple method for the determination of urinary testosterone excretion in human urine

Vermeulen, A.; Verplancke, Joseph C. M. AUTHOR(S):

CORPORATE SOURCE: Akad. Ziekenhuis, Ghent, Belg. SOURCE: Steroids (1963), 2(4), 453-63

CODEN: STEDAM; ISSN: 0039-128X

DOCUMENT TYPE: Journal LANGUAGE: Unavailable

A method for estimation of the title compound (I) is described which involves isotope dilution and double thin-layer chromatography in order to provide a more reliable parameter of androgen production. Thus 104 counts/min. of I-4-14C was added to half of a 24-hr. urine sample, the pH adjusted to 5.0 by addition of 0.1 volume 0.1 M acetate buffer (pH 5.4), 1000 units β-glucuronidase added per ml. urine, the mixture incubated 48 hrs. at 37°, and extracted 4 times with Et20. The combined Et20 exts. were washed twice with 10% aqueous NaOH and twice with H2O, dried, and evaporated in vacuo. The residue was chromatographed on 2 g. Al203, elution of which

with 60 ml. 0.25% BtOH-C6H6 yielded I and 11-deoxy-17-ketosteroids. This mixture was separated by thin-layer chromatography, using CHC13-AcOEt (80:20). The I zone was identified by ultraviolet light and eluted with Bt20, which extract was evaporated to dryness. A mixture of the residue and 0.3 ml. AcOH containing 0.2 ml. 28 CrO3 was kept overnight at room temperature, diluted

with 2 ml.  $\rm H2O$ , and extracted with AcOEt. The organic extract was evaporated to dryness and the

ne residue subjected to thinlayer chromatography on silica gel, using Et20 for development. An aliquot of the eluate was used to determine 4-androstene-3,17-dione (II) by a micro-2immermann reaction. Rf values of I and other 17-keto steroids and II and other oxidation products are tabulated to show that a satisfactory separation was achieved. It was shown by experiment that 11-oxo steroids did not interfere. The precision of the method was calculated by the formula of Snedecor (Biometrics 8, 85(1952)) to be about 2  $\gamma$  when perfect thin-layer chromatograms were obtained. The sensitivity was estimated to be about 4  $\gamma/24$  hrs. Tables are presented showing the excretion of I by normal and unhealthy male (12) and female (5) patients.

IT 31356-29-3

RN

(Derived from data in the 7th Collective Formula Index (1962-1966)) 31356-29-3 HCAPLUS

CN Butanoic acid, 2-[(2,4-dinitrophenyl)amino]- (CA INDEX NAME)

L11 ANSWER 76 OF 94 HCAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1963:404679 HCAPLUS

DOCUMENT NUMBER: 59:4679

ORIGINAL REFERENCE NO.: 59:896b-d

TITLE: Thin-layer chromatographic detection of amino acids in

urine

AUTHOR(S): Walz, D.; Fahmy, A. R.; Pataki, G.; Niederwieser, A.;

Brenner, M.

CORPORATE SOURCE: Univ. Basel, Switz.

SOURCE: Experientia (1963), 19, 213-17

CODEN: EXPEAM; ISSN: 0014-4754

DOCUMENT TYPE: Journal LANGUAGE: German

AB Dinitrophenyl derivs. (I) of urinary amino acids are prepared by the method of Peraino and Harper (CA 56, 6285b). The excess reagent is extracted with ether, dried over anhydrous Na2SO4, and evaporated under vacuum. The residue

taken up in acetone. Ether-soluble I is extracted following acidification with 6N HCl. Acidsol. I is then extracted with a mixture of equal parts of EtOAc

and
BuOH. Following drying over anhydrous Na2SO4, the solvent is removed under
vacuum and the residue taken up in a small quantity of EtOAc-BuOH. Plates

for chromatog, are prepared according to Brenner, et al. (CA 55, 20077b). Chromatograms are developed with toluene-2-chloroethanol pyridine-25% NH40H (50:35:15:7 volume/volume); CHC13-benzvl alc.-Ac0H (70:30:3 volume/volume):

CHC13-MeOH-AcOH (70:30:5 volume/volume); CHC13-MeOH-AcOH (95:5:1)

volume/volume);

pyridine; BuOH saturated with 25% NH4OH at room temperature. The detection of

35 urinary constituents by multiple development and 2-dimensional chromatog. is described.

31356-29-3, Butyric acid, 2-(2,4-dinitroanilino)-IT

(detection of, in urine) RN 31356-29-3 HCAPLUS

CN Butanoic acid, 2-[(2,4-dinitrophenyl)amino]- (CA INDEX NAME)

L11 ANSWER 77 OF 94 HCAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1963:404678 HCAPLUS

DOCUMENT NUMBER: 59:4678

ORIGINAL REFERENCE NO.: 59:896a-b

TITLE: Two new staining procedures for quantitative

estimation of proteins on electrophoretic strips Groth, S. Fazekas de St.; Webster, R. G.; Datyner, A. AUTHOR(S):

CORPORATE SOURCE: Australian Natl. Univ., Canberra

SOURCE: Biochimica et Biophysica Acta (1963), 71, 377-91

CODEN: BBACAO: ISSN: 0006-3002 Journal

DOCUMENT TYPE: LANGUAGE: Unavailable

Two new procedures are described for the estimation of protein by direct photometry on electrophoretic strips. The protein complexes of Procion Brilliant Blue RS and Coomassie Brilliant Blue R250 are shown to follow Beer's law up to 50 and 20 y/cm., resp. The lower limits of detection are 2 and 0.5 y/cm. Within these ranges the absolute amount of protein can be estimated within a single test with an error of about ±10%. The major contribution to the error arises from uneven application of the samples. Relative concns. within a mixture of proteins can be evaluated to an error of less than ±3%. Technical details of the procedures and of the equipment required are given in full, and their areas of usefulness discussed.

31356-29-3

(Derived from data in the 7th Collective Formula Index (1962-1966))

31356-29-3 HCAPLUS RN

CN Butanoic acid, 2-[(2,4-dinitrophenyl)aminol- (CA INDEX NAME)

OS.CITING REF COUNT: 10 THERE ARE 10 CAPLUS RECORDS THAT CITE THIS RECORD (10 CITINGS)

L11 ANSWER 78 OF 94 HCAPLUS COPYRIGHT 2010 ACS on STN 1962:404225 HCAPLUS

ACCESSION NUMBER: DOCUMENT NUMBER:

57:4225 ORIGINAL REFERENCE NO.: 57:941h-i,942a-b

TITLE: AUTHOR(S): Spectrometric evaluation of the approximate pK of the

carboxyl group in 2,4-dinitrophenyl amino acids Ramachandran, L. K.; Sastry, L. V. S.

Indian Inst. Sci., Bangalore, India CORPORATE SOURCE: SOURCE: Biochemistry (1962), 1(1), 75-8 CODEN: BICHAW; ISSN: 0006-2960

DOCUMENT TYPE: Journal LANGUAGE: Unavailable

The changes in absorption at 360 mm of 21 2,4-dinitrophenylamino acids at various hydrogen ion concns. were examined, and the approx. pK of the carboxyl group in many of these compds. was evaluated from a curve relating absorbancy to pH. The effect of the ionization of the carboxyl on the contribution of absorbancy at 360 mm by the 2,4-dinitrophenyl (DNP) amino-chromophore was highly dependent on the distance of the carbon carrying the chromophore system from the carboxyl group. When this distance exceeded three C atoms, carboxyl ionization had little effect on absorbancy. The observed changes in the spectra would be consistent with resonance stabilization of the anion. DNP derivs. of  $\beta$ -aminobutyric acid, DL-- $\alpha$ -aminobutyric acid,  $\beta$ -aminoisobutyric acid, and DL-isoserine were prepared and m. 166-8, 190, 154, and 145-8°, resp. The DNP derivative of DL-isoserine seemed to undergo a structural transformation at acid pH, probably due to elimination of one mole of water, which was reversible on increasing the pH.

31356-29-3, Butvric acid, 2-(2,4-dinitroanilino)-

(ionization and spectrum of)

RN 31356-29-3 HCAPLUS

CN Butanoic acid, 2-[(2,4-dinitrophenyl)amino]- (CA INDEX NAME)

L11 ANSWER 79 OF 94 HCAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 1962:49552 HCAPLUS DOCUMENT NUMBER: 56:49552

ORIGINAL REFERENCE NO.: 56:9391a-b

TITLE: Standard ionophoretic mobilities of various

biochemicals, in amaranth units, at several pH values

from 3.3 to 9.3

AUTHOR(S): Thornburg, W. W.; Werum, L. N.; Gordon, H. T. CORPORATE SOURCE: California Packing Corp., Emeryville

SOURCE: Journal of Chromatography (1961), 6, 131-41

CODEN: JOCRAM: ISSN: 0021-9673

DOCUMENT TYPE: Journal LANGUAGE: Unavailable

cf. CA 54, 19089f. The "Am value," defined as 0.01 of the distance

between spots of the uncharged dye, Apolon, and the neg. charged dye, Amaranth, is tabulated for numerous known organic compds. (including N bases, amino acids, carbohydrates, organic acids, and phosphate esters) in 30% HCONH2 organic buffers at 8 pH values ranging from 3.3 to 9.3. The pK and mol.-weight values calculable from ionophoretic data sometimes differ considerably from expected values owing to unusually strong mol.

interactions with the buffers. The mobility pH pattern nevertheless gives significant information about mol. structure of unknowns.

31356-29-3, Butvric acid, 2-(2,4-dinitroanilino)-(electrophoresis of)

RN 31356-29-3 HCAPLUS

CN Butanoic acid, 2-[(2,4-dinitrophenyl)amino]- (CA INDEX NAME)

L11 ANSWER 80 OF 94 HCAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1961:106464 HCAPLUS DOCUMENT NUMBER: 55:106464

ORIGINAL REFERENCE NO.: 55:20077b-c

Thin-layer chromatography of amino acid derivatives on TITLE: silica-gel G. N-(2,4-Dinitrophenvl) amino acids and

3-phenv1-2-thiohydantoins AUTHOR(S):

Brenner, M.; Niederwieser, A.; Pataki, G. CORPORATE SOURCE: Univ. Basel, Switz.

SOURCE: Experientia (1961), 17, 145-53

CODEN: EXPEAM; ISSN: 0014-4754

DOCUMENT TYPE: Journal LANGUAGE: Unavailable

cf. Brenner and Niederwieser, CA 55, 4685e. The title compds. (I) and (II), resp., were separated by thin-layer chromatog. on silica-gel G. Acidand H2O-soluble I were chromatographed in one dimension with PrOH:NH3 (70:30). I not soluble in acid were separated 2-dimensionally; the 1st solvent-system was toluene, pyridine, ethylenechlorohydrin, 0.8N NH3 (100:30:60:60), applied on equilibrated layers; the 2nd system was CHCl3,

benzyl alc., AcOH (70:30:3). 39 refs. 31356-29-3, Butyric acid, 2-(2,4-dinitroanilino)-

(chromatog. of)

31356-29-3 HCAPLUS RN

Butanoic acid, 2-[(2,4-dinitrophenyl)amino]- (CA INDEX NAME)

CO2H NO2 NH-CH-Et

OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L11 ANSWER 81 OF 94 HCAPLUS COPYRIGHT 2010 ACS on STN 1961:106463 HCAPLUS

ACCESSION NUMBER: DOCUMENT NUMBER: 55:106463

ORIGINAL REFERENCE NO.: 55:20077a-b

TITLE: A simple spectrophotometric method for the

determination of urea in blood and urine

AUTHOR(S): With, T. K.; Petersen, Tove Dreyer; Petersen, Birgit SOURCE: Journal of Clinical Pathology (1961), 14, 202-4

CODEN: JCPAAK; ISSN: 0021-9746 Journal

DOCUMENT TYPE:

LANGUAGE: Unavailable

The method of Watt and Chrisp (CA 48, 6920b) for the determination of urea in pure

solns. was modified to permit the determination of urea in blood and urine. The

method is suitable for routine clin. analyses of large nos. of samples, except those from patients receiving sulfonamides or p-amino-salicylic acid. In these samples an atypical color reaction develops.

31356-29-3

(Derived from data in the 6th Collective Formula Index (1957-1961))

RN 31356-29-3 HCAPLUS

CN Butanoic acid, 2-[(2,4-dinitrophenyl)amino]- (CA INDEX NAME)

ORIGINAL REFERENCE NO.:

L11 ANSWER 82 OF 94 HCAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1961:71100 HCAPLUS DOCUMENT NUMBER: 55:71100

TITLE: Separation of 2.4-dinitrophenyl derivatives of some

55:13528i,13529a amino acids by the countercurrent method of

partitioning

AUTHOR(S): Khokhlov, A. S.; Ch'ih, Ch'ang-Ching

#### STN Search

CORPORATE SOURCE: Inst. Antibiotics, Moscow

SOURCE: Biokhimiya (Moscow) (1960), 25, 1030-34

CODEN: BIOHAO: ISSN: 0320-9725

DOCUMENT TYPE: Journal LANGUAGE: Unavailable

The method of countercurrent partitioning was used for dinitrophenyl derivs. Low concns. of the components was art essential requisite. Accuracy of the method was sufficiently adequate for all practical

purposes. 31356-29-3P, Butyric acid, 2-(2,4-dinitroanilino)-RL: PREP (Preparation)

(separation by countercurrent partition) RN 31356-29-3 HCAPLUS

CN Butanoic acid, 2-[(2,4-dinitrophenyl)amino]- (CA INDEX NAME)

L11 ANSWER 83 OF 94 HCAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1961:71099 HCAPLUS

DOCUMENT NUMBER: 55:71099

ORIGINAL REFERENCE NO.: 55:13528i

TITLE: Modification of the alcohol dehydrogenase (ADH) method

in the determination of blood alcohol

Alha, Antti R.; Tamminen, Veikko AUTHOR(S): Univ. Helsinki

CORPORATE SOURCE:

SOURCE: Annales Medicinae Experimentalis et Biologiae Fenniae

(1960), 38, 121-5 CODEN: AMEBA7; ISSN: 0003-4479

DOCUMENT TYPE: Journal

LANGUAGE: English

AB A modification of the ADH method is presented. EtOH is allowed to diffuse in enzyme solution using a Widmark flask at room temperature

(Derived from data in the 6th Collective Formula Index (1957-1961)) RN 31356-29-3 HCAPLUS

CN

Butanoic acid, 2-[(2,4-dinitrophenyl)amino]- (CA INDEX NAME)

OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

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L11 ANSWER 84 OF 94 HCAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER:
                         1961:13427 HCAPLUS
DOCUMENT NUMBER:
                         55:13427
ORIGINAL REFERENCE NO.: 55:2649h-i,2650a-h
                         Synthesis of dinitrobenzomorpholines and a new ring
                         system, triazolobenzomorpholine
AUTHOR(S):
                         Jurgens, Harold R.; Burton, Anne L.; Eichenbaum,
                         Alice; Clapp, Leallyn B.
CORPORATE SOURCE:
                         Brown Univ., Providence, RI
SOURCE:
                         Journal of Organic Chemistry (1960), 25, 1710-13
                         CODEN: JOCEAH; ISSN: 0022-3263
DOCUMENT TYPE:
                         Journal
LANGUAGE:
                         Unavailable
OTHER SOURCE(S):
                         CASREACT 55:13427
    Picramides (and related compds.) of \beta-amino alcs. in which there were
     bulky groups on the \alpha-C underwent ring closure with various bases to
     give substituted benzomorpholines. A nitro group in position 5 was
     reduced to an amine; diazotization gave a new ring system,
     triazolobenzomorpholine. The picramides of ethanolamine, m.
     109.5-10.5°; 2-amino-1-butanol, m. 90-2°;
     1-amino-2-propanol, m. 132.5-3.5°: 2-amino-3-butanol, m.
     100-2.5°; diethanolamine, m. 138-9.5°; and
     1-amino-2-methyl-2-propanol, m. 160.6-1.6°, were prepared by standard
     procedures, except the last. Other picramides were not isolated but were
     used directly to prepare the corresponding benzomorpholine. Picryl chloride
     (60 g.) in 600 ml. MeOH refluxed 45 min. with 46.5 g.
     2-amino-2-methyl-1-propanol, 30 g. NaOMe in 200 ml. MeOH added during 10
     min., the mixture stirred 0.5 hr. at reflux, cooled, and the product
     removed, washed, and isolated gave 40.5-5.1 g.
     5,7-dinitro-3,3-di-methylbenzomorpholine (I), m. 174.5-6.0° (C6H6).
     I took up the calculated amount of H (in the presence of PtO2) for 2 nitro
     groups, but the product decomposed in air and was not further characterized.
     I (31.1 g.) in 400 ml. 95% alc. and 200 ml. 28% NH40H was stirred
     mechanically at 45-55° while a slow stream of H2S was introduced
     during 2.5 hrs., the solution cooled, and the product collected.
Concentration of
     the filtrate gave 15.6 g. 7-nitro-5-amino-3,3-dimethylbenzomorpholine
     (II), m. 182.5-4.5° (decomposition); benzal derivative m. 160-3° (95%
     alc.); monoacetyl derivative m. 195-6.5°. II (5 g.) in 50 ml. 20%
     H2SO4 treated during 10 min. at 0° with 1.7 g. NaNO2 in 10 ml. H2O.
     the mixture stirred 15 min. at 0-10°, and the product isolated gave
     4.9 g. 8-nitro-4,4-di-methyltriazolo[1,5,4-de]benzomorpholine (III),
     yellow needles, m. 151.5-3.5°. III (0.92 g.) in 30 ml. MeOH
     reduced with H at 1 atmospheric over 0.25 g. PtO2 gave 0.5 g.
     8-amino-4, 4-di-methyltriazolo [1,5,4-de] benzomorpholine (IV), cubic
     crystals, m. 217.5-20.5°; benzoyl derivative m. 219.5-21.5°.
     3,5-Dinitro-4-chlorobenzoic acid was obtained in 95% yield from
     p-C1C6H4CO2H. The acid was converted to the amide, m. 186°, in 83%
     vield via the acid chloride, m. 58°. The amide (12.4 g.) heated
     with 12 g. P205 15 min. at 300-50° and the resultant nitrile distilled
     at 220-5°/15 mm. and recrystd. gave 5.5 g. 3,5-dinitro-4-chlorobenzonitrile (IV), m. 143-4.5° (MeOH). IV (3.
     g.) refluxed 0.5 hr. with 2.5 g. 2-amino-2-methyl-1-propanol in 60 ml.
     alc. and refluxed an addnl. 0.5 hr. with 1.6 g. NaOMe in 60 ml. MeOH gave
     1.2 g. 5-nitro-7-cyano-3,3-dimethylbenzomorpholine, orange crystals, m.
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180-1.5°. The following compds. were similarly prepared: 3-hydroxymethyl-3-ethyl-5,7-dinitrobenzo-morpholine, orange crystals, m. 139.5-41°, 37%; 3-hvdroxymethvl-3-methvl-5,7dinitrobenzomorpholine, orange crystals, m. 147.2-8.6°, 47%; and 3,3-bis(hydroxymethyl)-5,7-dinitrobenzomorpholine, yellow powder, m. 158.5-60° (decomposition), 31%. Two nitro groups were best introduced into 4-chlorobenzotrifluoride, vielding 84% 3-nitro-4-chlorobenzotrifluoride and then 85% 3,5-dinitro-4-chlorobenzotrifluoride (VI). VI (7 g.) in 50 ml. MeOH refluxed with 4.65 q. 2-amino-2-methyl-1-propanol, 4 q. NaOMe added in 50 ml. MeOH, the mixture refluxed 10 min., and H2O added gave 4.8 g. 5-nitro-7-trifluoromethyl-3,3-dimethylbenzomorpholine (VII), golden needles, m. 108-9.5°. VII (1 g.) reduced quant. in 40 ml. MeOH at 1 atmospheric in 1 hr. over 0.3 g. PtO2 and the product sublimed at 70°/1 mm. gave 0.8 g. 5-amino-7-trifluoromethyl-3,3-dimethylbenzomorpholine (VIII), m. 80-2°. VIII (0.27 g.) in 30 ml. 50% H2SO4 treated during 10 min. with cold 0.12 g. NaNO2 in 10 ml. H2O, the mixture poured into 100 ml. H2O, and the product recrystd. gave 0.10 g. 8-trifluoromethyl-4,4-di-methyltriazolo[1,5,4-de]benzomorpholine, m. 101-2.5° (dilute MeOH). Standard methods for diazotization of IV and coupling of the product with various compds. in NaOAc solution were used to obtain dves as follows (coupling compound, m.p., color, % yield given): PhNMe2, 181-3°, orange-yellow, 76; PhNEt2, 149-51°, orange, 82; α-naphthylamine, 245-7°, dark red, 70; resorcinol, 225° (decomposition), orange-red, 20.

103040-15-9P, 1-Butanol, 2-(2,4,6-trinitroanilino)-RL: PREP (Preparation)

(preparation of) RM

103040-15-9 HCAPLUS

CN 1-Butanol, 2-[(2,4,6-trinitrophenyl)amino]- (CA INDEX NAME)

L11 ANSWER 85 OF 94 HCAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER:

1957:86391 HCAPLUS

51:86391 DOCUMENT NUMBER: ORIGINAL REFERENCE NO.: 51:15685c

TITLE: Influence of buffers on the separation of

dinitrophenyl derivatives of amino acids by means of

paper chromatography

Iwainsky, H.

AUTHOR(S): CORPORATE SOURCE: Humboldt-Univ., Berlin

SOURCE: Hoppe-Seyler's Zeitschrift fuer Physiologische Chemie

(1954), 297, 194-8 CODEN: HSZPAZ: ISSN: 0018-4888

DOCUMENT TYPE: Journal LANGUAGE: Unavailable

The influence of various buffers on the paper chromatographic separation of

dinitrophenyl derivs. of amino acids (i.e. of cystine, asparagine, etc.) with various solvents is studied. The pH zone 9-11 is recommended as most suitable. BuOH-iso-AmOH-EtOH-buffer (20:20:6.5:30) is used as a new solvent mixture

31356-29-3

(Derived from data in the 6th Collective Formula Index (1957-1961))

31356-29-3 HCAPLUS RN

CN Butanoic acid, 2-[(2,4-dinitrophenyl)amino]- (CA INDEX NAME)

L11 ANSWER 86 OF 94 HCAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1957:86390 HCAPLUS

DOCUMENT NUMBER: 51:86390

ORIGINAL REFERENCE NO.: 51:15684h-i,15685a-c

TITLE: Some cellulose ion exchangers of low substitution and

their chromatographic application

AUTHOR(S): Porath, Jerker

CORPORATE SOURCE: Univ. Uppsala, Swed.

SOURCE: Arkiv foer Kemi (1957), 11, 97-106

CODEN: ARKEAD; ISSN: 0365-6128 DOCUMENT TYPE: Journal

LANGUAGE: Unavailable

AB cf. C.A. 50, 7204e. CH2C12 (2 moles) in 200 ml. of EtOH and Na2SO3 (1 mole) in 300 ml. of water were heated to 120° for 6 hrs. with stirring in an autoclave. The reaction mixture was evaporated to dryness, ground, and extracted continuously with boiling MeOH. The cooled extract gave

70 g. of C1CH2SO3Na (I). Cellulose powder (100 g.) and a solution of 200 g. of NaOH in 300 ml. of water was stirred and allowed to swell for 4-12 hrs. A solution of 10 g. of I in 60 ml. of water was added portion-wise with stirring. The mass was dried at 90-5° until 80% of the water was removed. The product should contain from 0.85 to 0.5 meg. of sulfonate groups per q. of dry powder; if lower, heat the mixture until the water content is reduced to 14%. Cool the mixture and pour into 1 1. of 95% EtOH, add 1 l. of N HCl slowly with stirring and cooling and allow to settle. Repeat the acid treatment, collect the ion exchanger (II) on a Buchner funnel, wash with 1 l. of 0.5N HCl, wash with water until neutral, and suck dry. Suspend II in water or buffer and mix thoroughly before packing in a column. Equine antidiphtheria was separated into 4 components by using a column of II eluted with increasing concns. of phosphate buffer. Sulfoethyl cellulose was prepared in the same way. Triethylaminoethyl cellulose (III) was prepared by heating 80 g. of diethylaminoethyl cellulose with 350 ml. of 10% EtBr in EtOH for 4 hrs. (C.A. 44, 11104a). III-Br is stored wet or dry. III-OH is prepared by washing III-Br successively with 1

1. of 1% aqueous NaOH, distilled water to neutrality, Me2CO, and Et2O. (Derived from data in the 6th Collective Formula Index (1957-1961))

31356-29-3

RN 31356-29-3 HCAPLUS

CN Butanoic acid, 2-[(2,4-dinitrophenyl)amino]- (CA INDEX NAME)

CO2H NO2 NH-CH-Et 02N

OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L11 ANSWER 87 OF 94 HCAPLUS COPYRIGHT 2010 ACS on STN 1956:64344 HCAPLUS

ACCESSION NUMBER: DOCUMENT NUMBER: 50:64344

ORIGINAL REFERENCE NO.: 50:11966e-f

TITLE: Studies in potential antimycobacterial agents, XII.

Synthesis of some 4-hydroxy-3-quinolylhydrazine

derivatives and their in vitro activity

AUTHOR(S): Popli, S. P.; Vora, V. C.

CORPORATE SOURCE: Central Drug Research Inst., Lucknow

SOURCE: Journal of Scientific & Industrial Research (1955),

14C, 228-30

CODEN: JSIRAC; ISSN: 0022-4456 Journal DOCUMENT TYPE:

LANGUAGE: Unavailable

Some new 4-hydroxyquinolyl derivs. have been prepared and tested for in AB

vitro tuberculostatic action. 873997-64-9P, Butyramide, 2-p-sulfanilylanilino-

RL: PREP (Preparation)

(preparation of) RN 873997-64-9 HCAPLUS

CN Butanamide, 2-[[4-[(4-aminophenyl)sulfonyl]phenyl]amino]- (CA INDEX NAME)

L11 ANSWER 88 OF 94 HCAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1956:64343 HCAPLUS

DOCUMENT NUMBER: 50:64343

ORIGINAL REFERENCE NO.: 50:11966b-f

TITLE: Studies in potential antimycobacterial agents. XI. Synthesis of p-amino-p'-(carboxyalkylamino)diphenyl

sulfones, their esters, hydrazides, and amides AUTHOR(S): Khosla, M. C.; Anand, Nitya; Dhar, M. L. CORPORATE SOURCE: Central Drug Research Inst., Lucknow Journal of Scientific & Industrial Research (1955), SOURCE: 14C, 222-7 CODEN: JSIRAC; ISSN: 0022-4456 DOCUMENT TYPE: Journal LANGUAGE: Unavailable (In the following R1 = CO2Et, R2 = CO2Bu, R3 = CO2C8H17, R4 = CONHNH2, R5 = CONH2, R6 = CO2H.] A description is given of the synthesis of some 4-H2NC6H4SO2C6H4NHR-4 (I), where R = carboxyalkyl, and their esters, hydrazides, and amides from 4-02NC6H4SC6H4N(SO2C6H4Me-4)R-4 (II, R = K) and the esters of Br-substituted acids in anhydrous dioxane by standard methods. The following II were prepared (R and m.p. given): CH2R1, 64°; CHMeR1, -; CHEtR1, 86°; CHBuR1, -; (CH2)5R1, 55°; (CH2)10R1, -. 4-02NC6H4S02C6H4N(S02C6H4Me-4)R-4: were CH2R1, 168°; CHMeR1, 160°; CHBuR1, 130°; (CH2)R1, 95-6°; (CH2)10R1, 65°. 4-02NC6H4SO2C6H4NHR-4: CH2R1, 180°; CHMeR1, 115-16°; CHEtR1, 105°; CHBuR1, 91-2°; (CH2)5R1, 132-3°; (CH2)10R1, 90°. I: CH2R1, 179°; CHMeR1, 160°; CHEtR1, 102-4°; CHBuR1, 130°; (CH2)5R1, 147-9°; (CH2)10R1, 125°; CH2R2, 110°; CHMeR2, CHEtR2, 159-160°, 122-3°; (CH2)5R2, 108-9°; CH2R3, 115°; CHMeR3, -; CHEtR3, 93°; CHBuR3, 104-6°; (CH2) 5R3, 115-17°; CH2R4, 180°; CHMeR4, 123-4°; CHBuR4, 173°; (CH2)5R4, 164-6°; (CH2)10R4, 148-9°; CH2R5, 248°; CHEtR5, 218-20°; CHBuR5, 202-3°; (CH2) 5R5, -; (CH2) 10R5, -; CH2R6, 188-90°; (CH2) 10R6, 174-5°. 873998-11-9, Butyric acid, 2-p-sulfanilylanilino-RL: PREP (Preparation)

Butanoic acid, 2-[[4-[(4-aminophenyl)sulfonyl]phenyl]amino]- (CA INDEX

CO2H

(and derivs.)

873998-11-9 HCAPLUS

RN

CN

NAME)

L11 ANSWER 89 OF 94 HCAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 1956:20593 HCAPLUS

DOCUMENT NUMBER: 50:20593

ORIGINAL REFERENCE NO.: 50:4279c

TITLE: Separation of dinitrophenols from dinitrophenyl derivatives of amino acids and peptides

Turba, F.; Gundlach, G.

Biochemische Zeitschrift (1955), 326, 322-4

AUTHOR(S):

SOURCE:

CODEN: BIZEA2; ISSN: 0366-0753

DOCUMENT TYPE: Journal LANGUAGE: Unavailable

AB With anionotropic Al203 it was possible to sep. dinitrophenyl (DNP) derivs. of amino acids and peptides from dinitrophenol, which occurs in the production of the DNP derivs. and which interferes with the determination of free

amino groups of DNP derivs. of amino acids and peptides.

IT 31356-29-3P, Butyric acid, 2-(2,4-dinitroanilino)-RL: PREP (Preparation)

(separation of mixts. containing dinitrophenol and) RN 31356-29-3 HCAPLUS

CN Butanoic acid, 2-[(2,4-dinitrophenyl)amino]- (CA INDEX NAME)

L11 ANSWER 90 OF 94 HCAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1955:46097 HCAPLUS

DOCUMENT NUMBER: 49:46097
ORIGINAL REFERENCE NO.: 49:8859d-i,8860a-b

TITLE: The applicability of reduction methods to the

determination of terminal carboxyl amino acids in

peptides and proteins

AUTHOR(S): Grassmann, Wolfgang; Hormann, Helmut; Endres, Horst
CORPORATE SOURCE: Max-Planck-Inst. Protein Leather Research, Regensburg,

Germany

SOURCE: Chemische Berichte (1955), 88, 102-17

CODEN: CHBEAM; ISSN: 0009-2940

DOCUMENT TYPE: Journal LANGUAGE: Unavailable

OTHER SOURCE(S): CASREACT 49:46097

B cf. C.A. 49, 3816f, 7024b. The method was applied to synthetic peptides, which gave about 90% yield of N-dinitrophenylamino alc., from the terminal

acid, and no reductive splitting of peptide bonds. Di-Me
N-benzoyl-L-glutamate (0.8 g.) cooled and stirred with 3 g. LiBH4 in 30

cc. tetrahydrofuran, refluxed 30 hrs. in a dry atmospheric, cooled, 20 cc. H2O-saturated BuOH added, the filtrate evaporated in vacuo, the residue

extracted with

Et20, and the extract evaporated yielded 92.5% N-benzoyl-L-glutaminediol (I), white needles, m. 85°. I hydrolyzed 8 hrs. in 25% HCl, the BzOH filtered out, the filtrate evaporated in vacuo, the residue shaken 3 hrs. with 10 cc. H2O, 1 g. NaHCO3, and 0.8 g. 3,5-(OZN)ZCGH3F (II) in 20 cc. EtOH, 0.2 g. glycine added to react with the excess II, H2O added, the EtOH evaporated, and the residue extracted with Et2O yielded 89.9% N-(3,5-dinitrophenyl)-L-glutaminediol (III), m. 103°, yellow

needles from H2O. L-Lysine-2HCl, esterified in the cold with MeOH-HCl,

the mixture evaporated, NaOMe in MeOH added, NaCl filtered out, and the product reduced with LiAlH4 and treated with II as above, yielded 51.4%

α,ε-bis(3,5-dinitrophenvl)-L-lysinol (IV), fine bright yellow needles, m. 71° (from alc.-H2O). Similarly treated, Me N-benzoyl-DL-serinate (reduced with LiBH4) yielded 85.9% N-benzoyl-DL-serinol, m. 122°, fine white needles from Et2O, and 93.2% 3,5-dinitrophenyl-DL-serinol (V), fine yellow needles, m. 128° (from alc.-H20). DL-Methionine esterified and acetylated in MeOH and AcoEt vielded 91.4% Me acetylmethionine, m. 96°, white leaflets which with LiBH4 and II vielded 88.7% 3,5-dinitrophenyl-DL-2-aminobutanol (VI), m. 101° from alc.-H2O, identified with that prepared by treatment of DL-EtCH(NH2)CO2H with LiAlH4 and II. Me aspartate was only partially reduced when treated as above with LiAlH4 and II, yielding 69% 2,4 - (O2N)C6H3OCH:CHC(:CHOH)NHC6H3(NO2)2 - 2,4 (VII), bright yellow needles from alc., which was proved to have 4 NO2 groups (by titration with TiCl3) and a OH, and a CHO group. The terminal amino acids of the following synthetic peptides were determined by reduction of the ester with LiBH4 and treatment with II as above, and the products identified by absorption spectra and Rf value (peptide, product, yield given): glycyl-L-aspartic acid (the intermediate di-Me N-acetylglycyl-L-aspartate, m. 107°), VII, 50%; L-valv1-glvcv1-L-lvsine, IV, 89.4%; glvcv1-L-phenvlalanv1-L-glutamic acid, III, 90.7%; glvcvl-L-leucvl-L-glutamic acid, III, 87.2% [also some 3,5-dinitrophenylleucine (VIII)]; L-leucylglycylglycine, 3,5-dinitrophenylcolamine (IX), 90%, with some VIII. Without esterification, the single acids gave 1% dinitrophenyl derivative; di- and tripeptides, 1.76-6%; peptides containing phenylalanine, 8-11%. Insulin treated similarly, and chromatographed on kieselguhr-celite showed 2.39% dinitrophenylalaninol (X) per 100% amino acid, 2,4-dinitrophenol (XI), and VIII, without esterification, 0.482% X. Absorption spectra between 200 and 450 m $\mu$  are given for III, IV, V, VI, VII, IX, X, and N, O-bis(dinitrophenyl) tyrosinol (XII). The dinitrophenyl derivs. can be quantitatively separated by columnar chromatography. The following Rf values for paper chromatography were developed with Decalin-10% AcOH-iso-AmOH-CH2CICH2OH (9:6:6:2) and are compared with values in other solvents (loc. cit.): IV, 0.49; XII, 0.29; V, 0.41; VII, 0.47; III, 0.55; IX, 0.52; X, 0.71; 3,5-dinitrophenylprolinol, 0.83; XI, 0.82; VI, 0.85; 3,5-dinitrophenylvalinol, 0.87; 3,5-dinitrophenylphenylalaninol, 0.85; 3,5-dinitrophenylleucinol, 0.86; VIII, 0.90. 521298-16-8P, 1-Butanol, 2-(2,4-dinitroanilino)-, DL-RL: PREP (Preparation) (preparation of) 521298-16-8 HCAPLUS

RN

CN

L11 ANSWER 91 OF 94 HCAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 1955:23578 HCAPLUS DOCUMENT NUMBER: 49:23578

1-Butanol, 2-[(2,4-dinitrophenyl)amino]- (CA INDEX NAME)

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ORIGINAL REFERENCE NO.: 49:4519i,4520a-c
TITLE:
                        A new sulfur-containing amino acid from subtilin
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AUTHOR(S): Alderton, Gordon

CORPORATE SOURCE: Western Regional Research Lab., Albany, CA SOURCE: Journal of the American Chemical Society (1953), 75,

CODEN: JACSAT; ISSN: 0002-7863 DOCUMENT TYPE: Journal

LANGUAGE: Unavailable

cf. C.A. 46, 1979b. In addition to lanthionine, a 2nd amino acid was

isolated from the HCl hydrolyzates of subtilin. Its proposed structure is one of the  $\alpha$ -amino- $\beta$ -(2-amino-2-carboxyethylmercapto)-butyric

acids. The configurations at the 2  $\alpha$ -C atoms were determined

L-Methionine by a modification of the method of Fonken and Mozingo (C.A. 41, 4452d) yielded 57% L-α-aminobutyric acid (I), [α]D24

19.6° (c 5.00, 6N HCl). I by the method of Porter and Sanger (C.A. 42, 6920i) yielded DNP-L-α-aminobutyric acid (II), [α]D26

-38.0° (c 0.991, EtOAc), [α]D27 98.7° (c 0.62, 0.62%

NaHCO3), 95° in white light. L-Cysteine-HCl with Raney Ni yielded L-alanine (III), [a]D24 13.6° (c 5.00, 0.999N HCl), which

gave (dinitrophenyl)-L-alanine (IV), [α]D27 -11° (c 0.99,

EtOAc), [α]D27 136° (c 1.02, 1.02% NaHCO3), 133.4°

(white light). The new amino acid treated with Raney Ni and the product chromatographed yielded I and III (D-form), which gave II, [a]W25

116° (white light, c 0.519, 1% NaHCO3), and IV (D-form),  $[\alpha]$ W25 -81° (white light, c 0.725, 1% NaHCO3). The new amino

acid showed [a]D24 -34.7° (c 5.40, 1.01N HCl). 31356-29-3P, Butyric acid, 2-(2,4-dinitroanilino)-

RL: PREP (Preparation) (preparation of)

31356-29-3 HCAPLUS RN

Butanoic acid, 2-[(2,4-dinitrophenyl)aminol- (CA INDEX NAME) CN

OS.CITING REF COUNT:

(1 CITINGS)

L11 ANSWER 92 OF 94 HCAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 1955:15700 HCAPLUS

1

DOCUMENT NUMBER: 49:15700

ORIGINAL REFERENCE NO.: 49:3009h-i,3010a-d

TITLE: Preparation and properties of 2,4-dinitrophenvl-L-amino acids AUTHOR(S): Rao, Krishnarau R.; Sober, Herbert A.

CORPORATE SOURCE: Natl. Inst. of Health, Bethesda, MD

SOURCE: Journal of the American Chemical Society (1954), 76, 1328-31

CODEN: JACSAT; ISSN: 0002-7863

THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD

DOCUMENT TYPE: Journal LANGUAGE: Unavailable

 ${\tt AB} \quad {\tt Crystalline} \ 2, 4-{\tt dinitrophenyl} \ {\tt derivs.} \ {\tt of amino acids were prepared} \quad {\tt The purification}$ 

of many of the compds. required anhydrous conditions. The mol. rotations of the derivs. are 2 to 40 times those of the parent amino acid. UV absorption data and molar extinction values are given; the chromatog. behavior on paper in several solvent systems was examined Phys. data concerning the derivs. are listed (amino acid, m.p. (°C.) (uncor.), [M]D24-6 (°) for N NaOH, 4% NaHCO3, AcOH, and shift in [M]D given): glycine, 203-4, -, -, -, -; L-alanine, 177, 367, -, 39, 335;  $\beta$ -alanine, 155-6, -, -, -, -; L- $\alpha$ -aminobutyric acid, 133, 266, 277, -23, 223; DL-α-aminobutyric acid, 143, -, -, -, -; γ-aminobutyric acid, 145-6, -, -, -,-; L-norvaline, 58-60, 170, -, -78, 129; L-valine, 132, 309, -, -79, 236; DL-valine, 184, -, -, -, -; L-isovaline, 141, 114, -, -, 88; L-leucine, 94-5, 177, 176, -135, 147; L-isoleucine, 113-14, 252, -, -104, 188; DL-isoleucine, 174-5, -, -, -, -; L-alloisoleucine, 119, 260, -, -119, 204; DL-alloisoleucine, 135-6, -, -; D-alloisoleucine, 146-7, -, -, -, L-aa-aminononylic acid, 69-70, -277, -, -118, -, -335; L-serine, 173-4, -, 341, -65,325; DL-serine, 200-2, -, -, -, L-threonine, 145, -, 305, -141, 341; DL-threonine, 178, -, -, -; L-allothreonine, 152, -, 305, -84, 260; DL-allothreonine, 133-4, -, -, -,  $\gamma$ -hydroxy-L- $\alpha$ -aminobutyric acid, 164-5, -, 75, -179, 61; ε-hydroxy-L-α-aminocaproic acid, 141-2, 119, -, -134, 72; DL-methionine, 117-18, -, -, -, -; DL-ethionine, 104-5, -, -, -, -; L-cystine (di), 109, -, -1487, -1833, -930; S-benzyl-L-cystine, 111, -, -, -669, -610; L-phenylalanine, 189, -310, -261, -342, -298; L-tyrosine (O,N, di), 178-82 (decomposition), -, -, -60, -42; L-tryptophan, 221 (decomposition), -1291, -, -672, -1222; L-proline, 138, -2172, -, -1978, -2080; DL-proline, 181, -, -, -, -; L-hydroxyproline, 174-5, -3852, -; -3410, -3751; L-allohydroxyproline, -, -2706, -1874, -1322, -2665; DL-pipecolic acid, 138-9, -, -, -, -; L-aspartic acid, 186-7, 275, -, -20, 241; L-glutamic acid, -, -20, -, -253, -67 DL-glutamic acid, 148-9, -, -, -, -; L-asparagine, 180-2, -, 190, -100, 98; L-glutamine, 189-91, -177, -172, -302, -157; L-α, γ-diaminobutyric acid (di), 120-2 (decomposition), -, -, -360, -398; L-ornithine (di), 156-7, -, -, -339, -377; L-lysine (di), 170-2 (decomposition), -, -, -127, -165; L-histidine, 232-4, -107, -, -, -119; L-arginine, 260, -, -, -121, -169

IT 31356-29-3P, Butyric acid, 2-(2,4-dinitroanilino)-, DL-RL: PREP (Preparation) (preparation of)

6

RN 31356-29-3 HCAPLUS

CN Butanoic acid, 2-[(2,4-dinitrophenyl)amino]- (CA INDEX NAME)

OS.CITING REF COUNT:

THERE ARE 6 CAPLUS RECORDS THAT CITE THIS RECORD (6 CITINGS)

## STN Search

L11 ANSWER 93 OF 94 HCAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1955:3769 HCAPLUS DOCUMENT NUMBER: 49:3769

ORIGINAL REFERENCE NO.: 49:730f-q

TITLE: Photolysis of dinitrophenylamino acids

AUTHOR(S): Akabori, Shiro; Ikenada, Tokuji; Okada, Yoshimi;

Kohno, Keiichi CORPORATE SOURCE: Osaka Univ.

SOURCE: Proceedings of the Japan Academy (1953), 29, 509-10

CODEN: PJACAW; ISSN: 0021-4280

DOCUMENT TYPE: Journal

LANGUAGE: Unavailable

Quant. studies of the photolysis of dinitrophenylamino acids (DNP-amino acids) revealed that the decrease in color is not proportional to the degree of decomposition While α-DNP-amino acids are photosensitive, E-mono-DNP-lysine is not. The velocities of the photodecompn. of DNP-alanine, -glycine, -valine, and -aspartic acid are similar.

31356-29-3, Butyric acid, 2-(2,4-dinitroanilino)-

(photolysis of) RN 31356-29-3 HCAPLUS

CN Butanoic acid, 2-[(2,4-dinitrophenyl)aminol- (CA INDEX NAME)

L11 ANSWER 94 OF 94 HCAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1953:12331 HCAPLUS

DOCUMENT NUMBER: 47:12331 ORIGINAL REFERENCE NO.: 47:2207f-q

Amino diphenyl sulfones

INVENTOR(S): Rawlins, Albert L. PATENT ASSIGNEE(S): Parke, Davis & Co.

DOCUMENT TYPE: Patent

LANGUAGE: Unavailable FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE ---------------\_\_\_\_ HS 2589211 19520318 IIS

(p-H2NC6H4)2SO2, RX, and EtOH refluxed 18-24 hrs. give AB p-(p-H2NC6H4SO2)C6H4NHR (I), where R is a lower aliphatic carboxylic acid or ester residue. Examples are given of I where R is: 2-carboxyethyl, m. 75°; carboxymethyl; 1-carboxypropyl; and 2-carboxypropyl. Other similar products are mentioned. They are useful as antiseptics and antibacterials. Cf. C.A. 43, 2637f.

873998-11-9P, Butyric acid, 2-p-sulfanilylanilino-

RL: PREP (Preparation)

(preparation of)

RN 873998-11-9 HCAPLUS

CN Butanoic acid, 2-[[4-[(4-aminophenyl)sulfonyl]phenyl]amino]- (CA INDEX NAME)

CO2H

OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)

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